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ALMRS
EQUIPMENT
ANALYSIS

Bureau Of Land Management

Montana State Office

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ALMRS PROCUREMENT ANALYSIS
Montana State Office

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EXECUTIVE SUMMARY

This Automated Land and Mineral Record System (ALMRS) Procurement Analysis reviews Montana's needs for equipment during ALMRS development, beginning this fiscal year (1985). The crux of this analysis is contained in the "Assumptions" and "Equipment Needs Analysis" sections. These sections describe the basic premises and objectives for ALMRS development and estimate what staff will be performing what type of functions in the State, volume of work to be performed, anticipated use of the system, existing compatible equipment, and additional equipment needed. Equipment need is described in terms of cathode ray tubes (CRTs), printers slaved to the CRTs, and concomitant telecommunications and ADP equipment. An overview of ALMRS development, as jointly developed with DSC, is provided in the "Introduction."

Summary tables at the end of this document condense these equipment needs into three priorities:

Priority 1 - equipment sufficient to provide for minimum operation in State, District and Resource Area offices to allow collection of remaining case data and to begin capturing survey data -- a total of 18 CRTs and 6 printers.

Priority 2 - increase equipment capability to meet both user and public demand to track and query the data base. Adequate equipment will also be available for the State Office staff to enter survey data -- an additional 21 CRTs and 14 printers.

Priority 3 - full implementation of tracking and querying systems at all levels of the State -- an additional 21 CRTs and 5 printers.

The procurement analysis spans approximately five years and totals approximately $120,000. If all priorities were funded by the ALMRS office in DSC (D-150), it would mean the purchase of 60 CRTs (31 already on board bring the total to 91) and 25 printers (19 already on board bring the total to 44); $48,000 in telecommunications upgrades; $50,000 in ADP equipment upgrades; and $22,000 in maintenance contracts.

This analysis was completed cooperatively by all affected offices and Information Services (952).

INTRODUCTION

The Automated Land and Mineral Record System (ALMRS) has evolved since April, 1982, when a decision was made to automate information from oil and gas case records as an aid to managing the workload involved in reducing the pending backlog of these cases. Today's ALMRS mission is to develop and implement an efficient automated system for recording, maintaining, and retrieving information concerning: legal land description, ownership, status, and title information in support of Federal programs and public users of such records.

ALMRS is incrementally being developed to logically progress from a manual records system to a fully automated system. It will incorporate three components: legal land description, ownership/status data, and case management/processing. The system will also eventually be incorporated with a geographic information system (GIS), being developed separately in DSC, to allow a graphic display of the components listed above. The legal land description component will describe parcels of land via any recognized method such as the Public Land Survey system, metes and bounds, parcel numbering, and tracting. The ownership and status component will describe both the rights to use and enjoy property (including the right to transfer to others) and the availability of a given tract of land for governmental or private use (or for the disposal or lease of the land or its resources into non-Federal ownership or tenure). The management/processing component will allow for the input, manipulation, retrieval, and reformatting of data in the system to meet management purposes such as reports, records, billings, etc. The definition of records and other terms is included in Appendix 1.

In its present configuration ALMRS is simply a case recordation system that has been operational since June of 1982. It presently accommodates only 38 of the 102 data elements to be covered by ALMRS. Operating limitations are apparent and temporary solutions for accommodating ALMRS data are required. Montana has chosen to adopt the Oregon Case Access System (ORCA). In August 1984, ALMRS data base was duplicated and transferred to the Montana Level 6. A dual system has been maintained since that time. ORCA is an interactive system and allows the user to scan the data base by case type, disposition, serial number or by township and range. It is far more user friendly than ALMRS. However, ALMRS has far greater report capability so the two systems together offer tremendous flexibility.

In the years to come the manual records such as the Historical Index, Serial Register Pages, and some updates to the Master Title Plat will be eliminated in favor of electronic information displayed on CRTs (cathode ray tubes). Legal descriptions of the approximately 7800 townships in Montana, North Dakota and South Dakota will be available, as well as status data. Data from case recordation (oil/gas and other active cases) and mining claim recordation will be available. Stipulations applicable to various case types and lands will be available for case processing, adjudication, and management decisions.

ALMRS will allow BLM to quickly validate legal land descriptions in cases, summarize case acres, adjust total acres in cases as lands are added or deleted, and streamline steps in the adjudication process. It will produce more comprehensive output reports eliminating labor intensive and often redundant manual steps. Status data will be more consistent. Errors in manual records can be easily corrected and accuracy of data will increase, especially for statistical reports.

As equipment is in place, land status records will be current and can be quickly and easily updated at any Bureau office that has the authority to take an action that affects land and case status. The public is being encouraged to go to the district and resource area managers for action on their needs. ALMRS will provide the field manager with a modernized records system and status information to facilitate use of the realty authorities already delegated to the field offices.

ALMRS status outputs will be more understandable to the public, BLM, and other users. A narrative description of status information that can be printed by section, township, and range will facilitate land record use and understanding by all users. ALMRS will add a new dimension to the public land records because it can aggregate and manipulate land status data. Knowledge of title ownership or use can be obtained from BLM in a more timely and consistently accurate manner. Benefits to commercial and industrial users, individuals, and other government users, who will have the capability to retrieve data selectively by area, case type, and action criteria, will be significant. Faster access will benefit Bureau and non-Bureau users of BLM records.

ALMRS will provide an interface with, and automated transfer of, data to the Simultaneous Oil and Gas program and to the Financial Management System. It will promote coordination and exchange of data among Minerals Management systems (BRASS, AFS, PAAS), USGS, Forest Service, and other governmental entities who rely on BLM for land status statistics.

EQUIPMENT ANALYSIS ASSUMPTIONS

1. The plan addresses equipment needs for FY 85 through FY 90 based on the following priorities:

   Priority 1 - procurement consists of all CRTs and printers needed to provide a minimum operation in the State, district offices, and resource areas to allow collection of the remaining case data, and to begin the capturing of survey (legal land description) data and/or status data. It represents a minimal equipment and staffing configuration. Because ALMRS is still in the design phase, Priority 1 procurement represents the minimum interim solution until full design is completed.

   Priority 2 - procurement increases the minerals and mining systems staffs' capability to track and query the data base for SO and public room users. Adequate equipment will also be available for SO staff to enter survey data and status data in ALMRS that will be collected at this time.

   Priority 3 - procurement provides for full implementation of tracking and querying systems at all levels of the State and completes the extent of this analysis based on ALMRS development specifications and the assumptions of this analysis. The integration of survey and status data into the final ALMRS system may present some unforseeable problems requiring additional equipment, but these kinds of needs cannot be seen at this time, as explained in our assumptions.

2. This analysis assumes that ALMRS will have sufficient telecommunications and computer processing support.

3. The plan addresses needs based on optimum configuration for implementation excluding Geographic Information System (GIS), because GIS technology has not fully been defined.

4. Optimum configuration means every office (SO Division, SO Branch, DO, RA, etc.) should have access to ALMRS data and be able to print out information in a convenient location based on user needs. This also includes adequate public use. Consider volume, location, and shared terminal vs. constant access.

5. Implementation will be essentially completed within this five-year period and involves all legal land description or survey work being done in-house and all status work being completed either by contract or in-house at the State's option. ALMRS will fund the collection of survey (legal land description) and status input.

6. Future interagency needs are not represented in this analysis and will be addressed by other means.

7. A very elementary workload analysis is needed at the time to assess the ALMRS workload and thus the necessary equipment (Priority 1) for FY 85. For example, a workload of inputting survey information for 2100 townships requires approximately 8400 hours or 4.1 employees per year. Equipment necessary for four employees would include three terminals, a planometer, work space, office equipment, storage area for plats, hanging rack for printouts, etc.

8. ALMRS implementation may retire the following: all Serial Register Pages, the Historical Index, and Mining Claim Microfiche. The microfiche indexes used in the Branch of Solid Minerals will be available in an improved version if it is not possible to eliminate them entirely by the use of ALMRS. The improved version would be produced via an update computer output microfiche (COM). The COM output time would be decreased from greater than 30 days to less than 48 hours, and COM-generated reports would be available on an as-needed basis rather than once quarterly.

9. For this analysis, do not consider the use of OMRON or RAMTEK terminals or mini- or microcomputers.

10. ALMRS will only pay for first-year maintenance of terminals.

EQUIPMENT NEEDS ANALYSIS (CRTs and Printers)

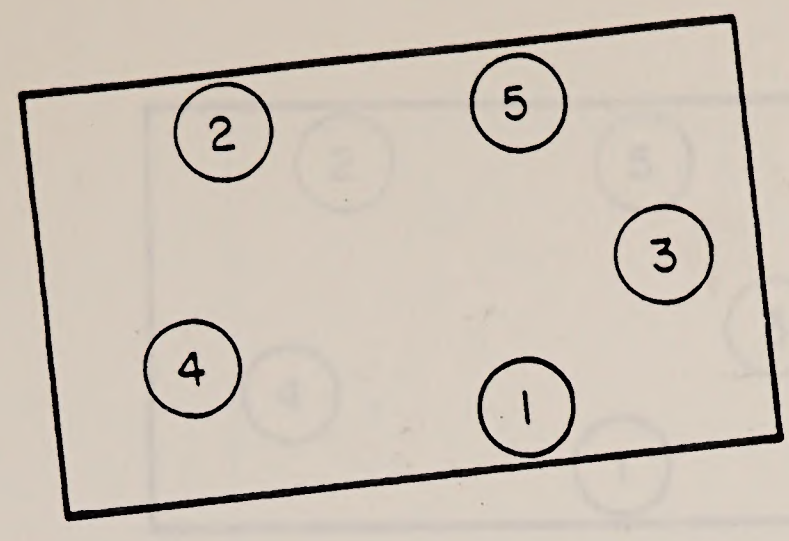
Based on the assumptions for implementation of ALMRS, workload and equipment needed have been estimated for all of Montana, North Dakota and South Dakota in the subsequent area-by-area equipment needs analysis. Because location of ALMRS work to be done is a key factor in identifying equipment needs, CRT and printer requirements have been identified by specific areas within the State Office and district office buildings. Each work area is numbered to correspond to a single page analysis showing the need, users, volume/usage, existing equipment, and additional equipment needed for ALMRS implementation.

Need is based on both current and future workload requirements. The ALMRS workload of each area is described in the "Need" paragraphs on each page. Identified users are both current and future, based on assumptions regarding automation of the manual lands system. The volume/usage paragraph on each page reflects both current and future use, estimated from present experience. The existing equipment is that equipment identified for ALMRS use that is compatible with latest specifications for ALMRs development. The additional equipment is based on need, location, and volume of workload.

Priority 1 procurement consists of all CRTs and printers needed to provide a minimum operation in the State, district and resource area offices to allow collection of the remaining case data and to begin the capturing of survey (legal land description) data. It represents a minimal equipment and staffing configuration.

Priority 2 procurement increases the minerals and mining systems staffs' capability to track and query the data base for MSO and public room users. Adequate equipment will also be available for SO staff to enter survey data and status data in ALMRS that will be collected at this time.

Priority 3 procurement provides for full implementation of tracking and querying systems at all levels of the State and completes the extent of this analysis based on ALMRS development specifications and the assumptions of this analysis. The integration of survey and status data into the final ALMRS system may present some unforseeable problems requiring additional equipment, but these kinds of needs cannot be seen at this time, as explained in our assumptions.



AREA-BY-AREA ANALYSIS

MONTANA STATE OFFICE

2nd Floor

1. Accounts
   Branch of Records

NEED: This unit is the central location for all new lands and minerals applications that must be serialized and initially input into the ALMRS system. They input all new assignments and rentals into ALMRS and are also responsible for issuing serial numbers and new proprietor I.D. numbers to the Districts. They have final responsibility for reviewing and correcting ORCA edits. They also are charged with DDA posting.

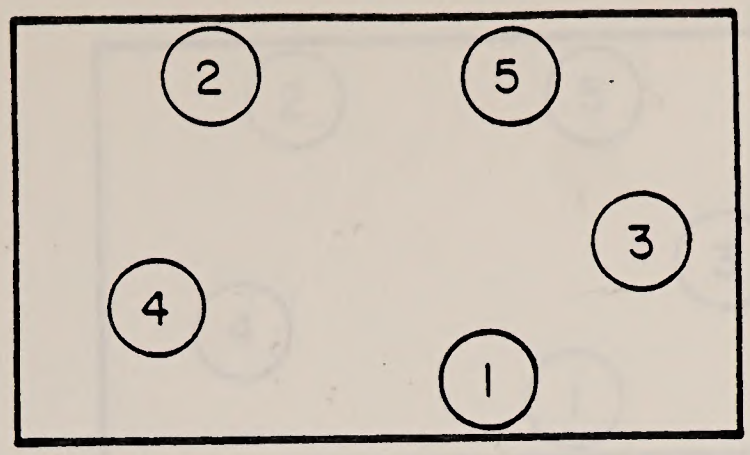
USERS: 1 Cash Clerk
1 Accounting Clerk

VOLUME/USAGE: DDA Accounts posted - 300 to 400 weekly
Newly serialized cases - 650 monthly
Rental receipts posted - 200 weekly
Assignments input - 330 monthly
6 - 7 hours usage daily

EXISTING EQUIPMENT: 1 CRT

ADDITIONAL EQUIPMENT NEEDED: None

Priority #1 - None
Priority #2 - None
Priority #3 - None



AREA-BY-AREA ANALYSIS

MONTANA STATE OFFICE

2nd Floor

2. Docket
Branch of Records

NEED: Docket is charged with maintaining an orderly filing system for all State Office lands and minerals case files. These files are stored until needed by other sections within the State Office or District or Resource Areas. Files are also pulled throughout the day for members of the public. Docket posts all actions relating to disposal or retrieval from the Federal Records Center or NARS. Montana also will be initiating a computerized suspense system and case tracking system during this period of time. Such a system will eliminate the time-consuming chargeout card system currently in use.

USERS: Docket staff and any overflow from Records Assistance or Accounts to input or retrieve.

VOLUME/USAGE: 20 - 25 reports biweekly
150 - 250 case files pulled for the public weekly
800 - 1000 case files sent to other sections weekly
1700 cases retired yearly
6 - 7 hours/day for each CRT

EXISTING EQUIPMENT: None

ADDITIONAL EQUIPMENT NEEDED: 2 CRTs, 1 printer

Priority #1 - one CRT
Priority #2 - one CRT and printer
Priority #3 - none

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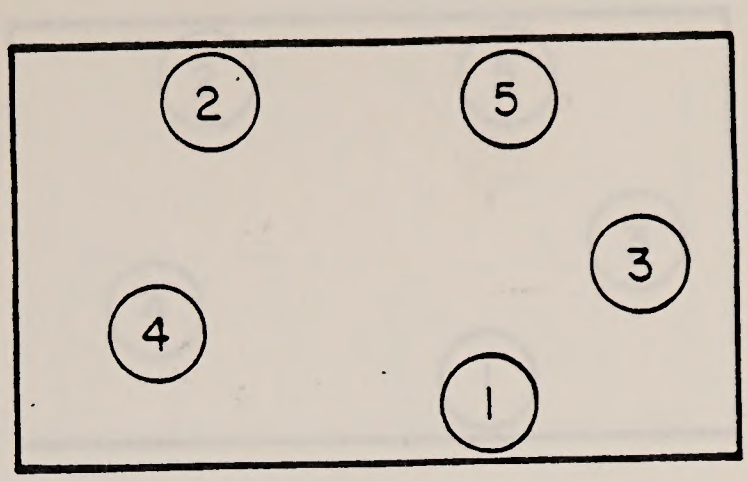

AREA-BY-AREA ANALYSIS

MONTANA STATE OFFICE

2nd Floor

3. Records Assistance
   Branch of Records

NEED: Records Assistance unit is adjacent to the Public Room and provides support and coordination for users of the Public Room. It responds to public queries on general status information, ownership, and land segregations. It verifies current survey information and oil and gas leasing information. It also assists the public in learning how to use ALMRS and interpret the information presented. The high speed printer will be used for the terminals in the Public Room also.

USERS: 4 Land Law Assistants
1 Lead Land Law Assistant
1 Legal Clerk

VOLUME/USAGE: 40 - 50 over-the-counter queries daily
50 - 75 telephone queries daily
30 - 40 written queries daily
4 - 5 hours usage daily (when SRPs and HIs are retired)

EXISTING EQUIPMENT: 1 CRT, 1 printer

ADDITIONAL EQUIPMENT NEEDED: 5 CRTs, 1 High Speed Printer

Priority #1 - 2 CRTs, 1 High Speed Printer
Priority #2 - 1 CRT
Priority #3 - 2 CRTs

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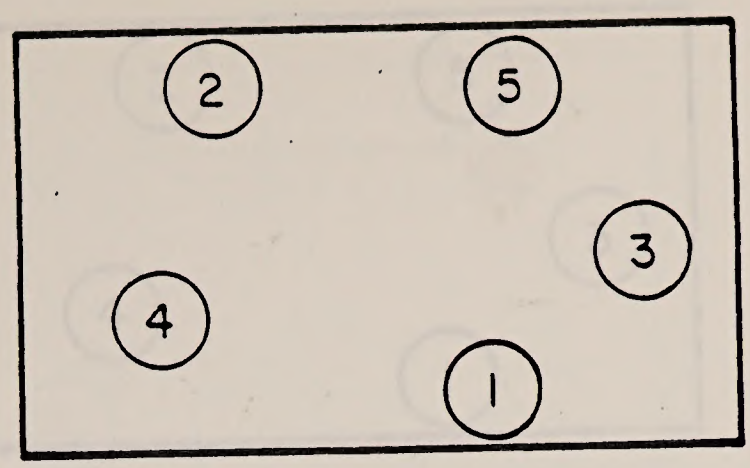

AREA-BY-AREA ANALYSIS

MONTANA STATE OFFICE

2nd Floor

4. Public Room
Branch of Records

NEED: This location is the hub of public lands activity for the state. It presently generates most of the public land information for the State and greatly affects public attitudes toward the Bureau's land management (and ALMRS). The proposed ALMRS equipment is for the replacement of the manual records system and for a user community that must have access to needed public lands information in a timely manner. The public must have access to serial register information, title records, current land status, and be able to query the system for any of the 11 administrative states included in ALMRS. Eventually, the public will be able to access all survey information such as mineral surveys, homestead entry surveys, and state boundary surveys on ALMRS.

USERS: Title, utility, oil/gas, and mining companies
Federal, state, and local governments
Surveyors, prospectors, and private landowners
Other individuals, usually for title research

VOLUME/USAGE: Three leasing companies and one law firm use the serial register pages and master title plats full-time. There are another 10-15 companies that frequently use the serial pages and plats. Terminal usage will double in the fall for mining claim data. There is also heavy public demand for oil and gas, mining claims, and other mineral information on a regular basis.
5-6 hours usage daily

EXISTING EQUIPMENT: 1 CRT

ADDITIONAL EQUIPMENT NEEDED: 12 CRTs

Priority #1 - 4 CRTs
Priority #2 - 4 CRTs
Priority #3 - 4 CRTs

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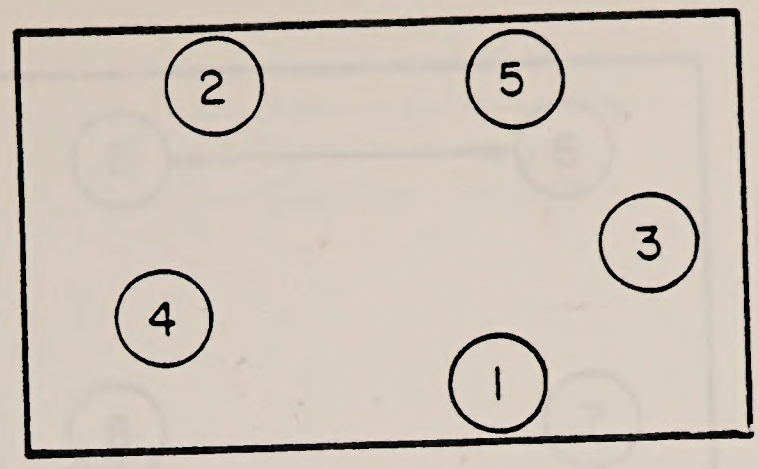

AREA-BY-AREA ANALYSIS

MONTANA STATE OFFICE

2nd Floor

5. Acreage Inventory
Branch of Records

NEED: Terminal would be used to input survey data on a part-time basis. In addition, it would be used for acreage inventory, mineral inventory, patent status, and may be used to check land status once that is started.

USERS: 1 Land Law Assistant

VOLUME/USAGE: This individual will be inputting and checking for errors in survey. She will also use terminal to generate PILT acreage and acreage inventory for public land statistics and public lands digest.
4-5 hours usage daily

EXISTING EQUIPMENT: None

ADDITIONAL EQUIPMENT NEEDED: 1 CRT

Priority #1 - 1 CRT
Priority #2 - None
Priority #3 - None

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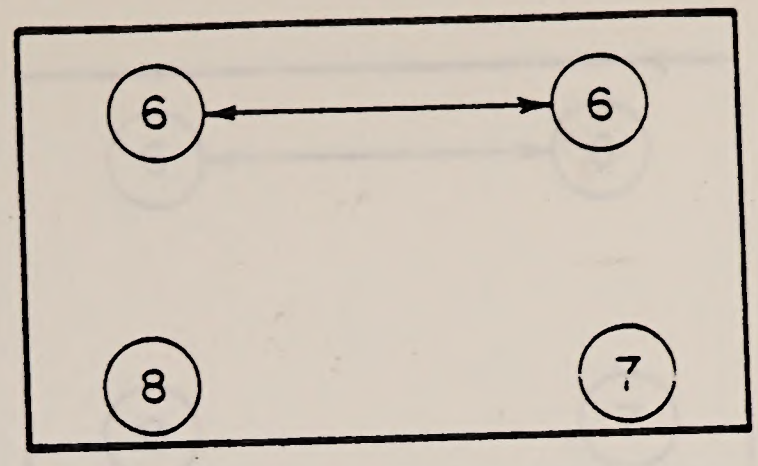


AREA-BY-AREA ANALYSIS

MONTANA STATE OFFICE

3rd Floor

6. Fluids Adjudication Section
Branch of Fluid Minerals

NEED:

This section processes all actions on oil and gas and geothermal minerals affecting the official lease files. The processing begins with the land status of an incoming offer and continues through issuance of the lease, assignments of the lease, rental payments, production on the lease, resulting in extensions, inclusion of the lease in unit or communitization agreements and finally termination, expiration relinquishment or cancellation. This then results in the whole procedure being repeated through the simultaneous offer process. The section accepts and maintains bond files.

USERS:

1 Supervisor, Land Law Examiner
8 Land Law Examiners
1 Supervisor, Land Law Assistant
2 Land Law Assistants
2 Legal Clerks (ALMRS Input)
4 Legal Clerks (Typing)

VOLUME/USAGE:

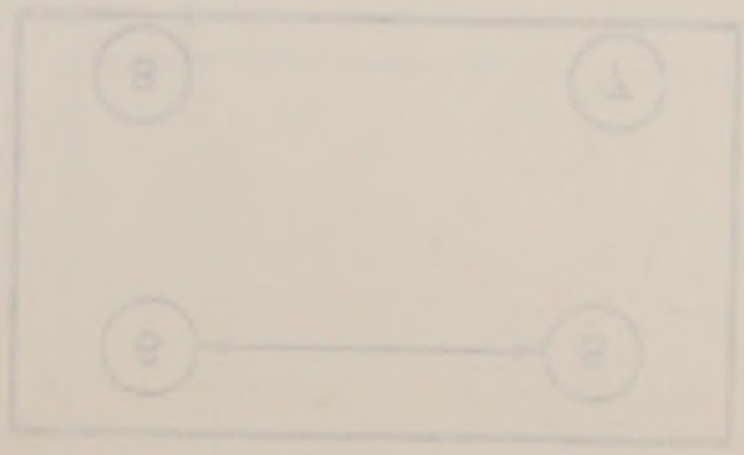
1 Terminal used for updating - 8 hours
1 Terminal used for updating - 4-5 hours
3 Terminals used for updating and queries by Legal Clerks
1 Terminal (Mail Desk) used for queries
9 Terminals used by Land Law Examiners for queries, reports and adjudication

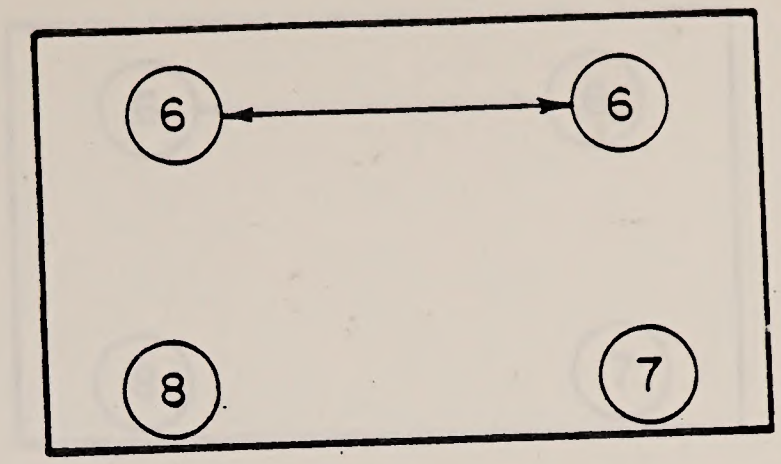
FY 1984 1336 Leases issued, 2,300,000 acres
5121 Assignments filed
4833 Assignments completed

EXISTING EQUIPMENT: 10 CRTs, 4 Printers

ADDITIONAL EQUIPMENT NEEDED: 5 CRTs, 1 Printer

Priority #1: 1 CRT
Priority #2: 2 CRTs, 1 Printer
Priority #3: 2 CRTs





AREA-BY-AREA ANALYSIS

MONTANA STATE OFFICE

3rd Floor

7. Agreements & Evaluation Section
Evaluation and Regulations Section
Branch of Fluid Minerals

NEED: These two sections will use the terminal to access oil and gas information for various reasons, i.e., drainage, KGS, CAs, units, first production dates, bond data, lessee and operator information, adjacent leases, etc.

USERS: 10 Geologists
2 Petroleum Engineers

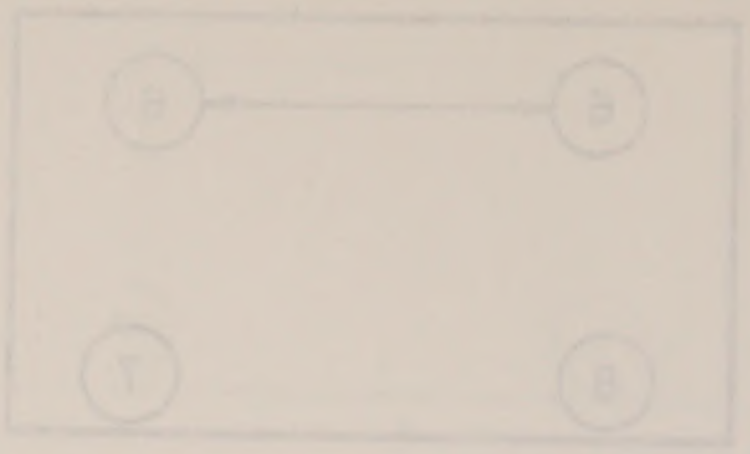
VOLUME/USAGE: 3 - 4 hours per day

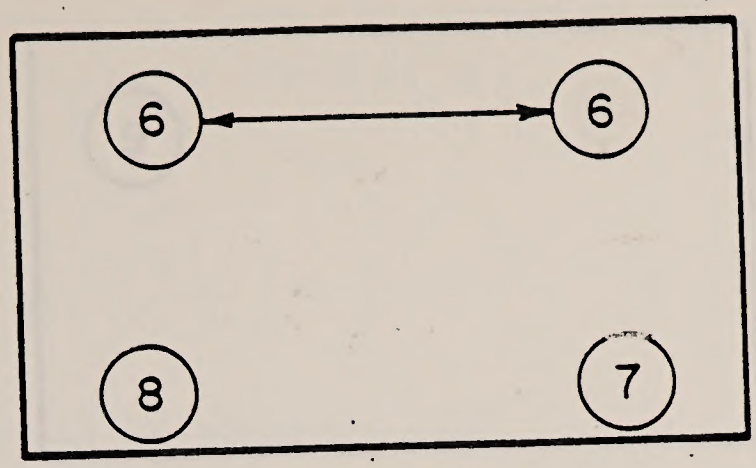
Non-Producing Leases - 12,000 - 15,600,000 Acres
Producing Leases - 1,800 - 1,300,000 Acres

EXISTING EQUIPMENT: None

ADDITIONAL EQUIPMENT NEEDED: 1 CRT

Priority #1 - None
Priority #2 - None
Priority #3 - 1 CRT





AREA-BY-AREA ANALYSIS

MONTANA STATE OFFICE

3rd Floor

8. Solid Minerals Adjudication Section
Branch of Solid Minerals

NEED: The Mining Claim Recordation Unit enters new claims, annual assessment and/or notice of intent information; transfers of interest, address and name changes, notices, decisions, etc. Responds to public, BLM personnel, and other agency inquiries. This requires obtaining reports categorized by location, name of claimant and claim name. The Mining Law and Leasable Minerals Unit enters interim actions and pending actions on mineral patent applications, contest actions, multiple use conflicts, petitions for deferment of annual assessment, leasable mineral applications (primarily coal, phosphate and hardrock); assignments, modifications, readjustments, renewals, bonding, etc. Each application requires land status research to check withdrawal information, availability of lands, and any other status conflicts. The regional coal lease sales information is entered for each tract. It is anticipated that a program will be established to maintain information on split estate refusals and consents to coal leasing as well as surface ownership data. It is also anticipated that with the consolidation of the Branch of Solid Minerals, there will be a need for public room facilities which would include terminal and printer capability.

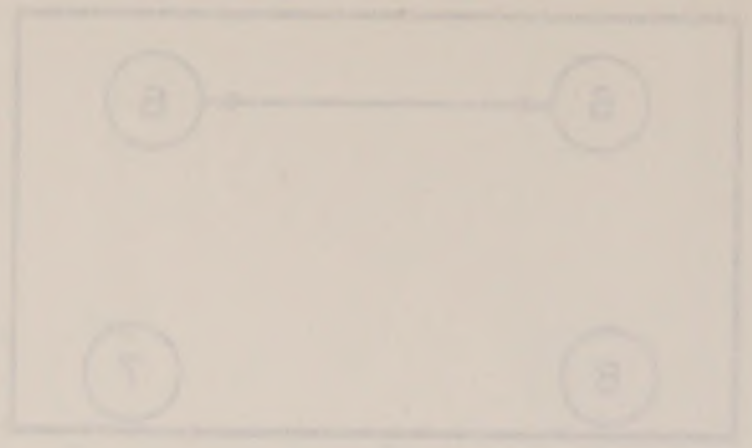
USERS: 2 Land Law Assistants
2 Land Law Examiners
1 Chief, Solid Minerals
Adjudication Section
4 Land Law Clerks
Public Use

VOLUME/USAGE: 12,000 - 14,000 new claims yearly
90,000 - assessments yearly
75,000 - updates (transfers, name and address changes, notices, decisions, and appeals)
275 - 300 Solid Leasable/Mining applications yearly
54 active coal & phosphate lease files to be entered (20 - 25 actions per case) plus patent applications
Public Room access (if Section moves to 7th Floor)

EXISTING EQUIPMENT: 3 CRTs and 1 printer

ADDITIONAL EQUIPMENT NEEDED: 5 CRTs, 1 high speed printer, 1 printer

Priority #1 - None
Priority #2 - 2 CRTs, (1 high speed printer - if Section moves to 7th floor)
Priority #3 - 3 CRTs, 1 printer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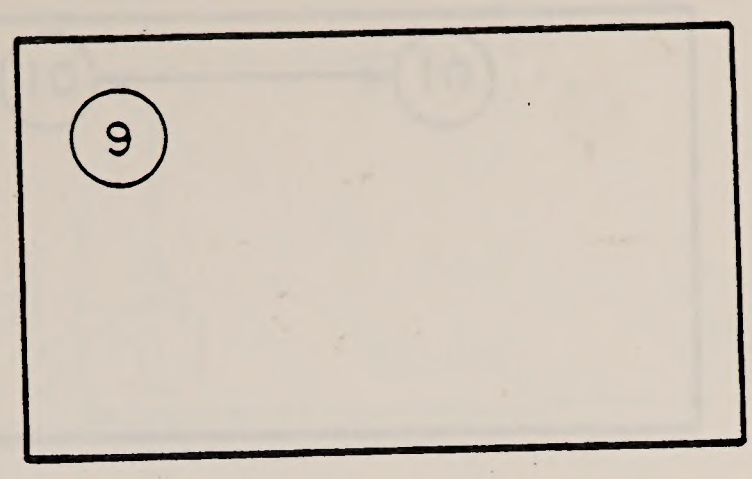


AREA-BY-AREA ANALYSIS

MONTANA STATE OFFICE

9. Division of Lands and Renewable Resources — 4th Floor

NEED:

Enter interim actions and pending actions on pending lands cases, all data on Indian patent actions, check land status. Monitor and update specific lands case types and Cultural Resources permits. Monitor and update the Withdrawal Review Matrix and other special programs. Monitor activities and claims on public lands affecting status and title, such as mining claims and mineral leases. This unit has the potential for monitoring other natural resource management claims on public lands such as grazing leases/privileges; protected areas such as wilderness, ACEC and natural areas; withdrawal reviews; managing cultural sites and encroachments; rights-of-way; activities/claims in key wildlife areas; timber sales/management; activities/claims affecting environmental concerns (air, water, soil, etc). They also run numerous reports, both from ALMRS and REX.

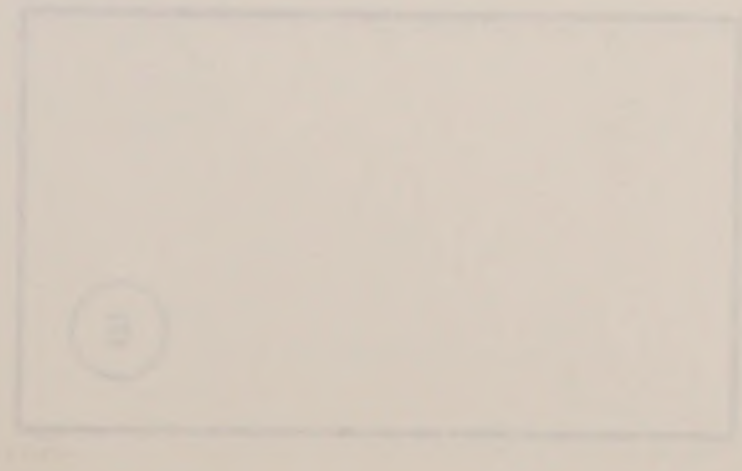
USERS: 4 Land Law Examiners
2 Realty Specialists
All Natural Resource Specialists, Clerks, Assistants & their Supervisors

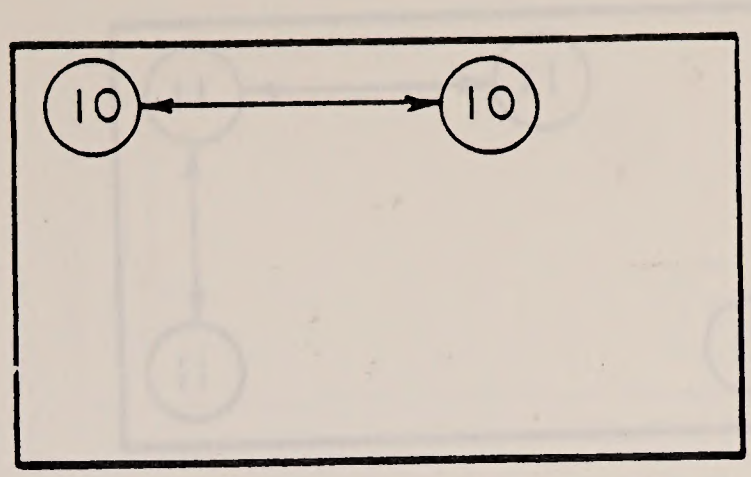
VOLUME/USAGE: Estimated usage will be 4-6 hours per day.

EXISTING EQUIPMENT: 2 CRTs, 1 printer

ADDITIONAL EQUIPMENT NEEDED: 2 CRTs

Priority #1 - None
Priority #2 - 1 CRT
Priority #3 - 1 CRT





AREA-BY-AREA ANALYSIS

MONTANA STATE OFFICE

6th Floor

10. Title Section
Branch of Records

NEED: The Title Section is charged with inputting all survey data for the three-state area. They will enter 7800 townships over the next four years. If the decision is made to enter status at the state office level rather than by contract, then this Survey unit will continue. If status is contracted, the CRTs identified in Priority #3 will not be required. Otherwise, the equipment will be used by the Title and Records Section for input and updating of KGS data, status correction and general access. One terminal would probably be transferred to Appraisal and Engineering for their use also.

USERS: 2 Data Transcribers (Survey)
1 Lead Land Law Assistant (Survey)
1 Supervisor (Drafting)
1 Lead Land Law Assistant (Drafting)
2 Land Law Assistants (Drafting)
4 Legal Clerks (Drafting)

VOLUME/USAGE: 6-7 hours daily for each CRT

EXISTING EQUIPMENT: None

ADDITIONAL EQUIPMENT NEEDED: 6 CRTs, 1 Printer

Priority #1 - 2 CRTs
Priority #2 - 1 CRT, 1 Printer
Priority #3 - 3 CRTs

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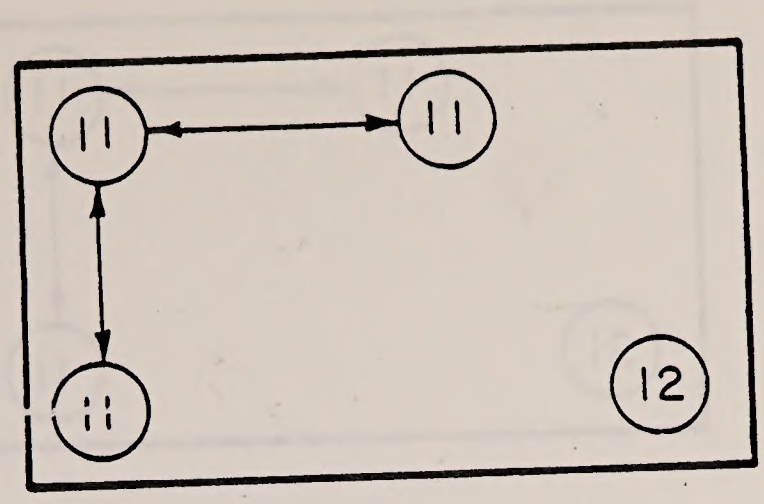


AREA-BY-AREA ANALYSIS

MONTANA STATE OFFICE

7th Floor

11. Mining Regulation Section
Mineral Development Section
Branch of Solid Minerals

NEED: These two sections will use the terminal to access mining claim data and solid mineral information on applications and leases. The data will be necessary for validity examinations and patent examinations on mining claims. It will also be used for mineral appraisals and mineral trespass cases. Access to the data would also quickly identify any mining claims on various lands transactions such as sales and exchanges.

USERS: 7 Geologists
4 Mining Engineers

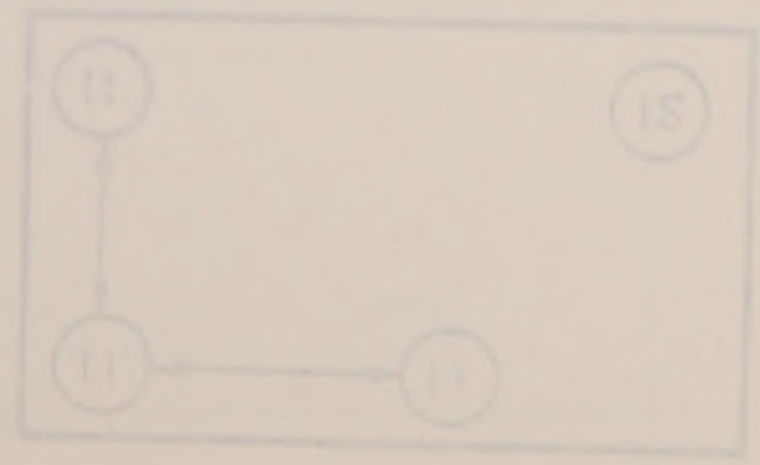
VOLUME/USAGE: 2 - 3 hours daily

90,000 mining claims
275 - 300 solid leasable/mining applications yearly
50 - 60 coal and phosphate leases

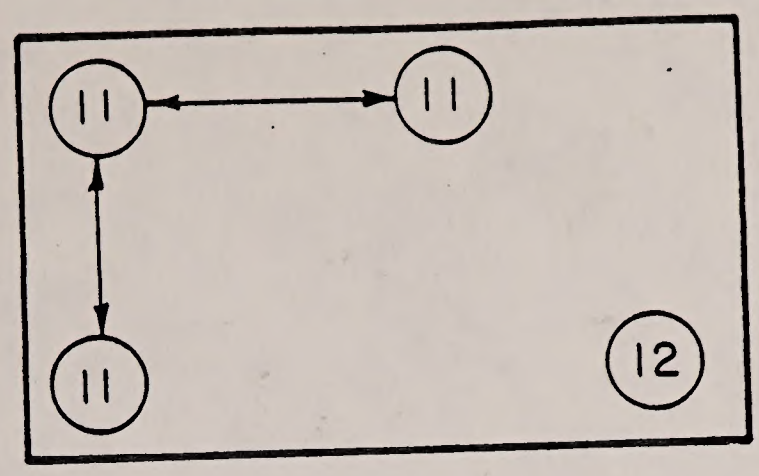
EXISTING EQUIPMENT: None

ADDITIONAL EQUIPMENT NEEDED: 1 CRT, 1 printer

Priority #1 - None
Priority #2 - 1 CRT, 1 printer
Priority #3 - None



AREA-BY-AREA ANALYSIS



Montana State Office

12. Branch of Information Services (ADP)
Division of Administration — 7th Floor

NEED: In Montana the ALMRS Coordinator is assigned to the Branch of Information Services. As a result the Coordinator, along with the entire ADP staff, provides continuous user support to all ALMRS/ORCA users. Support includes training, both inhouse and in the field, troubleshooting on data entry and equipment problems, and minor maintenance of terminals and printers. Also, because Montana is on the ORCA system, it is necessary to create exports, serial register pages and cross-index files daily. In the past two data entry personnel have assisted with data entry on a regular basis. It is anticipated they will spend 25% of their time on survey input in the future. Current equipment consists of one 7801 Honeywell CRT and three 7205 Honeywell CRTs. The 7205 terminals will not access RANDOM WALK, the interactive portion of ORCA, nor will they handle V-Forms, which is the most efficient method of survey input. The 7801 is being used by the programmer to develop the mining claim program that will merge mining claims and ALMRS/ORCA at the state level. To adequately support the ALMRS users, this office needs similar equipment for troubleshooting, maintenance, data entry and access.

USERS: 2 Computer Programmers
1 Computer Operator
2 Data Entry Personnel
1 ALMRS Coordinator

VOLUME/USAGE: 8 to 9 hours per day (7:00 a.m. to 4:30 p.m.)

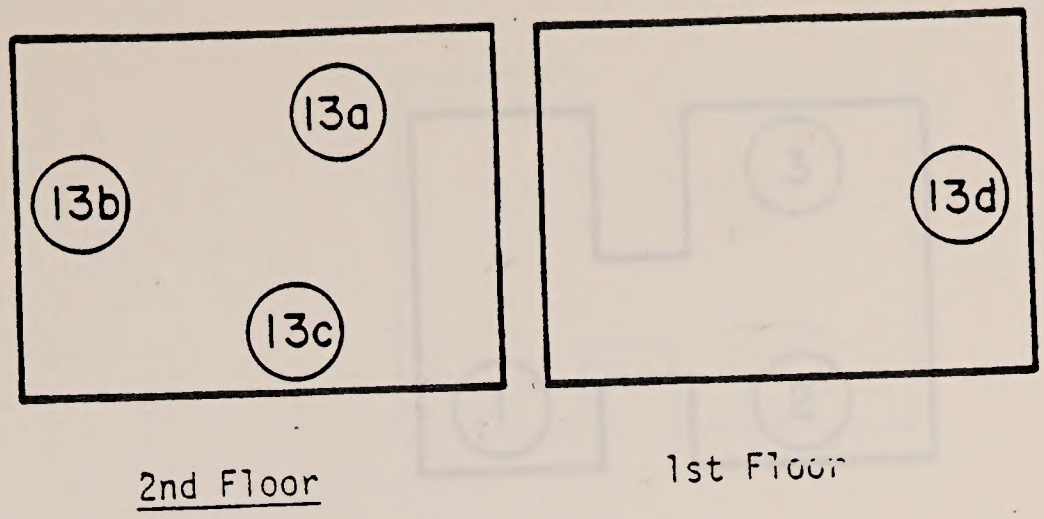
EXISTING EQUIPMENT: 1 CRT

ADDITIONAL EQUIPMENT NEEDED: 3 CRTs

Priority #1 - 2 CRTs
Priority #2 - 1 CRT
Priority #3 - None

AREA-BY-AREA ANALYSIS

Montana State Office



13. Division of Operations
13a. Appraisal
13b. Cadastral
13c. Law Enforcement
13d. Engineering

NEED: This unit has the potential to update appraisal information on exchanges, sales, rights-of-way and leases. It could review caseload for scheduling appraisals, review the most recent rate changes and appraisal values via ALMRS audit reports and manage the appraisal program. Appraisal values and changes could be updated directly into ALMRS. Cadastral personnel will use the terminal to identify individuals who have an interest in the land and various other types of information. For example, when the survey data base is established, they can retrieve by special survey type how many there are in any given area. They can also extract the current survey information for a given area.

Law Enforcement personnel will use the terminal to identify lessees, leases held by a particular proprietor, cases with certain actions pending, bond holders, operators and access the Law Enforcement Data System. Engineering could use the terminal to access JDR, MBO, Budget, dam files and other computer programs, such as road design, math pack, stress analysis and hydrologic programs.

No additional equipment has been planned for Engineering (First Floor, Midland Empire Building, because there is a CRT and slave printer in Fire Management. One of the terminals from Survey will eventually be placed in the Division of Operations also.

USERS: 6 Appraisers
2 Law Enforcement Personnel
20 Cadastral Surveyors
3 Engineers

VOLUME/USAGE: The terminal would be used 3 to 4 hours per day.

EXISTING EQUIPMENT: None

ADDITIONAL EQUIPMENT NEEDED: 1 CRT, 1 Printer

Priority #1 - 1 CRT, 1 Printer
Priority #2 - None
Priority #3 - None

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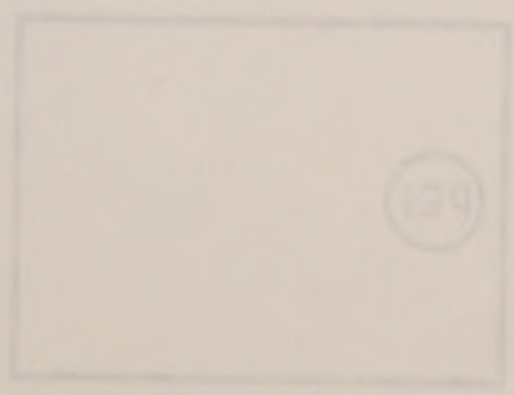
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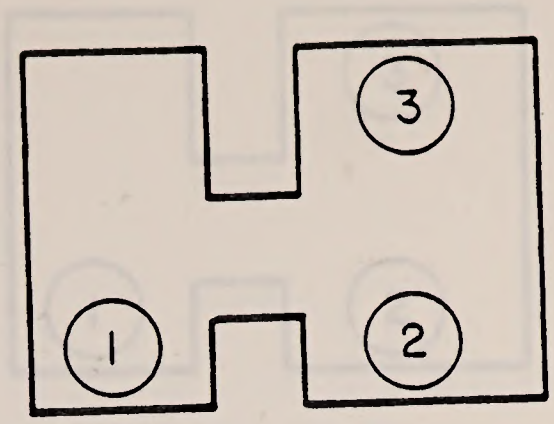

AREA-BY-AREA ANALYSIS

Miles City DO

1. Administrative Area and Public Room

NEED:

This unit responds to queries from other agencies and the public (over-the-counter, letter or phone) on land status, pending applications, mining claims and other lands data. The unit provides public assistance and education for public users of ALMRS equipment located in this area. The unit has the potential for meeting Administrative needs such as monitoring procurement, personnel, MBO, mailing lists, etc.

USERS: 15 resource specialists
The public

VOLUME/USAGE: The CRT would be used 3-4 hours per day.

EXISTING EQUIPMENT: None

ADDITIONAL EQUIPMENT NEEDED: 1 CRT, 1 printer

Priority #1 - None
Priority #2 - 1 CRT, 1 Printer
Priority #3 - None

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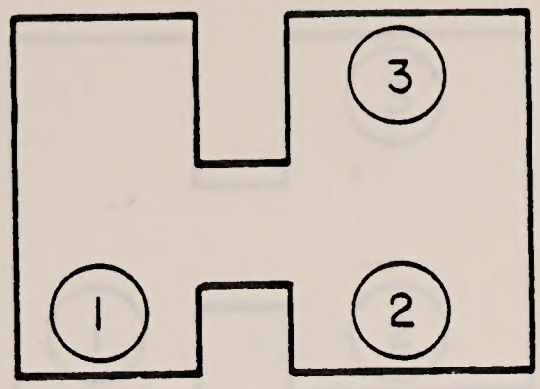

AREA-BY-AREA ANALYSIS

Miles City DO

2. Division of Lands & Renewable Resources

NEED:

Monitors and updates specific ALMRS case types such as trespass, pending and authorized lands cases, etc. Inputs all ALMRS applications filed at this location, trespass information, and timber sales. Tracks and reports all district/resource area progress and maintains control of all cases and reports to and from this location. This office is responsible for verification and correction of all ALMRS inputs from the district and ALMRS orientation/ training for local staff. The ALMRS Coordinator generates reports on applications to identify prior filings and updates ALMRS. The unit is also used for monitoring other natural resource management responsibilities on public lands such as grazing leases, privil[illegible]s; wilderness areas, ACEC, and natural areas; withdrawal reviews; managing cultural sites and encroachments; rights-of-way; activities/claims in key wildlife areas; timber sales/management; and programs such as RMAS, SAGERAM, JDR's, hydrologic modeling, etc.

USERS: 8 resource specialists
ALMRS coordinator

VOLUME/USAGE: The CRT is used 6-8 hours per day.

EXISTING EQUIPMENT: 1 CRT, 1 printer

ADDITIONAL EQUIPMENT NEEDED: 1 High-speed printer

Priority #1 - None
Priority #2 - 1 high speed printer
Priority #3 - None

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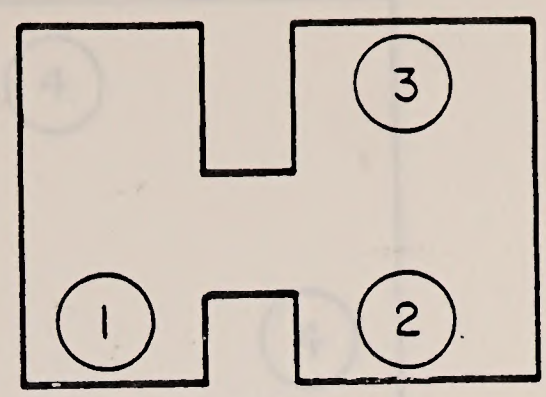

AREA-BY-AREA ANALYSIS

Miles City DO

3. Division of Mineral Resources

NEED:

This unit retrieves all information dealing with the fluids and solids program and may eventually input data. This office will track and report progress and maintain control for all district/resource mineral programs. This office will be responsible for verification and correction of all operational minerals inputs, depending upon future redelegation of responsibility from MSO. The terminals will also be used to access lease data for drainage cases, current lessee, bond holders, date of first production, unit and CA information, etc.

USERS: 17 Minerals Division personnel

VOLUME/USAGE: Estimated usage of the 3 CRTs is 4-5 hours each per day.

EXISTING EQUIPMENT: None

ADDITIONAL EQUIPMENT NEEDED: 3 CRTs, 2 printers

Priority #1 - 1 CRT, 1 printer
Priority #2 - 1 CRT
Priority #3 - 1 CRT, 1 printer

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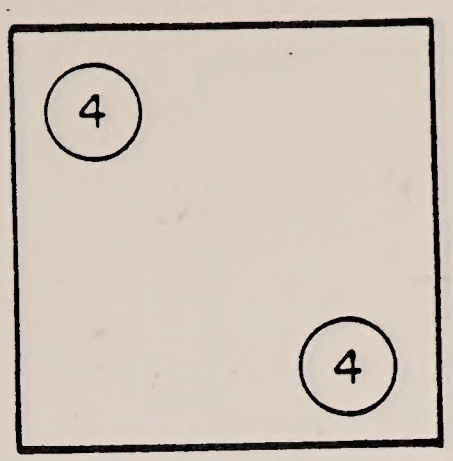


AREA-BY-AREA ANALYSIS

Miles City DO

4. Resource Areas (2)
   Big Dry Resource Area, Powder River Resource Area (detached)

NEED:

This unit manages lease/permitting systems; manages BLM natural resource programs such as lands, minerals, grazing, wildlife, recreation, wilderness, timber, soil/water/air, etc. A resource area may regularly monitor land status for any of these programs, but especially for range, trespass, rights-of-way, wilderness, cultural and possibly ACEC management. If further decentralization occurs, staff will enter interim actions on lands cases from reports or letters to and from applicants and other agencies along with pending action codes and verification of land status. The resource area responds to both public and interagency queries.

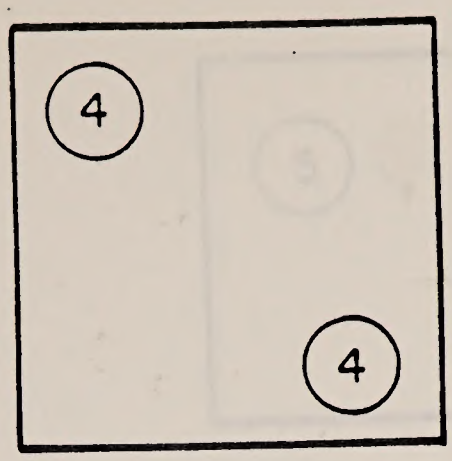
USERS: 41 Resource Specialists (especially realty specialist, archaeologist and range conservationists), 2 Area Managers, the Public

VOLUME/USAGE: The two CRTs would be used about 2-3 hours each per day.

EXISTING EQUIPMENT: 1 CRT, 1 printer

ADDITIONAL EQUIPMENT NEEDED: 1 CRT, 1 Printer

Priority #1 - None
Priority #2 - None
Priority #3 - 1 CRT, 1 Printer



AREA-BY-AREA ANALYSIS

Miles City DO

4. Resource Areas (2)
   Big Dry Resource Area, Powder River Resource Area (detached)

NEED:

This unit manages lease/permitting systems; manages BLM natural resource programs such as lands, minerals, grazing, wildlife, recreation, wilderness, timber, soil/water/air, etc. A resource area may regularly monitor land status for any of these programs, but especially for range, trespass, rights-of-way, wilderness, cultural and possibly ACEC management. If further decentralization occurs, staff will enter interim actions on lands cases from reports or letters to and from applicants and other agencies along with pending action codes and verification of land status. The resource area responds to both public and interagency queries.

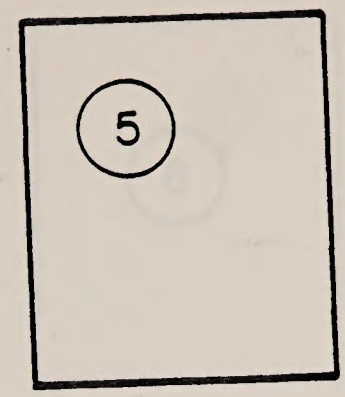
USERS: 41 Resource Specialists (especially realty specialist, archaeologist and range conservationists), 2 Area Managers, the Public

VOLUME/USAGE: The two CRTs would be used about 2-3 hours each per day.

EXISTING EQUIPMENT: 1 CRT, 1 printer

ADDITIONAL EQUIPMENT NEEDED: 1 CRT, 1 Printer

Priority #1 - None
Priority #2 - None
Priority #3 - 1 CRT, 1 Printer



AREA-BY-AREA ANALYSIS

Miles City DO

5. Billings RA
(detached)

NEED:

This unit manages lease/permitting systems; manages BLM natural resource programs such as lands, minerals, grazing, wildlife, recreation, wilderness, timber, soil/water/air, etc. A resource area may regularly monitor land status for any of these programs, but especially for range, trespass, rights-of-way, wilderness, cultural and possibly ACEC management. If further decentralization occurs, staff will enter interim actions on lands cases from reports or letters to and from applicants and other agencies along with pending action codes and verification of land status. The resource area responds to both public and interagency queries.

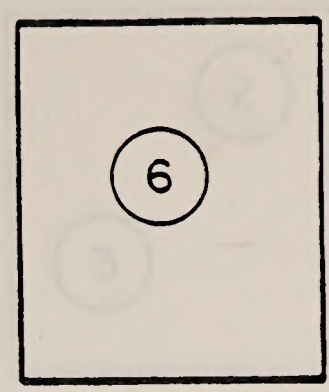
USERS: 13 Resource Specialists
Area Manager, the public

VOLUME/USAGE: The two CRTs would be used about 3-4 hours each per day

EXISTING EQUIPMENT: 1 CRT, 1 printer

ADDITIONAL EQUIPMENT NEEDED: 1 CRT, 1 Printer

Priority #1 - None
Priority #2 - None
Priority #3 - 1 CRT, 1 printer



AREA-BY-AREA ANALYSIS

Miles City DO

6. South Dakota RA
(detached)

NEED:

This unit manages lease/permitting systems; manages BLM natural resource programs such as lands, minerals, grazing, wildlife, recreation, wilderness, timber, soil/water/air, etc. A resource area may regularly monitor land status for any of these programs, but especially for range, trespass, rights-of-way, wilderness, cultural and possibly ACEC management. If further decentralization occurs, staff will enter interim actions on lands cases from reports or letters to and from applicants and other agencies along with pending action codes and verification of land status. The resource area responds to both public and interagency queries.

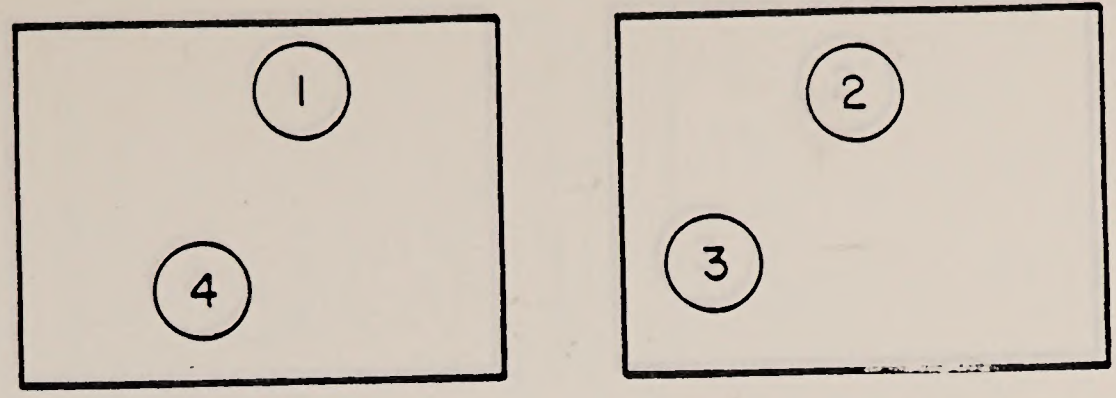
USERS: 6 Resource Specialists
Area Manager
The public

VOLUME/USAGE: The CRT would be used about 3-4 hours each per day

EXISTING EQUIPMENT: None

ADDITIONAL EQUIPMENT NEEDED: 1 CRT, 1 printer

Priority #1 - 1 CRT, 1 Printer
Priority #2 - None
Priority #3 - None



1st Floor

2nd Floor

AREA-BY-AREA ANALYSIS

Lewistown DO

1. Administrative Area &
   Public Room

NEED:

This unit inputs all ALMRS applications filed at this location, trespass information, and mineral and timber sales. This office will track and report all District/Resource Area progress and maintain control of all cases and reports to and from this location. This office is responsible for verification and correction of all ALMRS inputs from the district and ALMRS orientation/ training for local staff. It responds to queries from other agencies and the public (over-the-counter, letter, or phone) on land status, pending applications, mining claims, and other lands data. In the adjudicative process, the unit requests reports to identify prior filings and annotates ALMRS. The unit provides public assistance and education for public users of ALMRS equipment located in this area. This terminal can also be used for monitoring procurement, personnel, MBO, etc.

USERS: 1 Legal Clerk
The public

VOLUME/USAGE: Estimated usage of the two CRTs is 4-5 hours per day.

EXISTING EQUIPMENT: 1 CRT, 1 printer

ADDITIONAL EQUIPMENT NEEDED: 1 CRT, 1 High-speed printer

Priority #1 - None
Priority #2 - 1 CRT, 1 High-speed printer
Priority #3 - None

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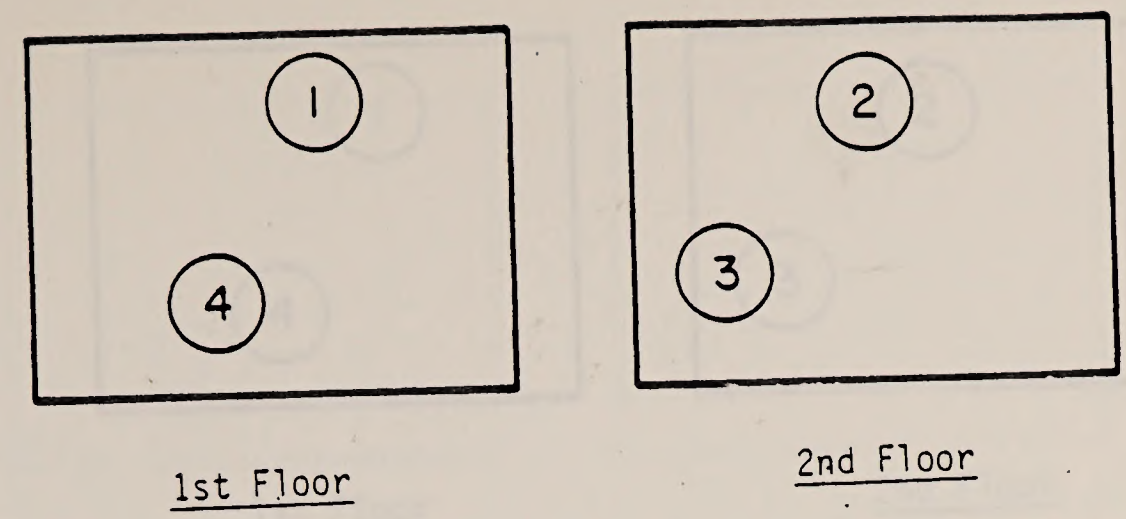

1st Floor

2nd Floor

AREA-BY-AREA ANALYSIS

Lewistown DO

2. Division of Lands & Renewable Resources

NEED:

Monitors and updates specific ALMRS case types such as trespass, pending and authorized lands cases, etc. The unit has the potential for monitoring other natural resource management claims on public lands such as grazing leases, privileges; protected areas such as wilderness, ACEC, and natural areas; withdrawal reviews; managing cultural sites and encroachments; rights-of-way; activities/claims in key wildlife areas; timber sales/management; activities/claims affecting environmental (air, water, soil, etc.). Adjudicative staff requests reports on lands cases to identify prior filings and updates ALMRS.

USERS: 10 Resource Specialists
1 Adjudicator

VOLUME/USAGE: The CRT would be used 4-5 hours per day.

EXISTING EQUIPMENT: None

ADDITIONAL EQUIPMENT NEEDED: 1 CRT, 1 printer

Priority #1 - None
Priority #2 - 1 CRT, 1 printer
Priority #3 - None

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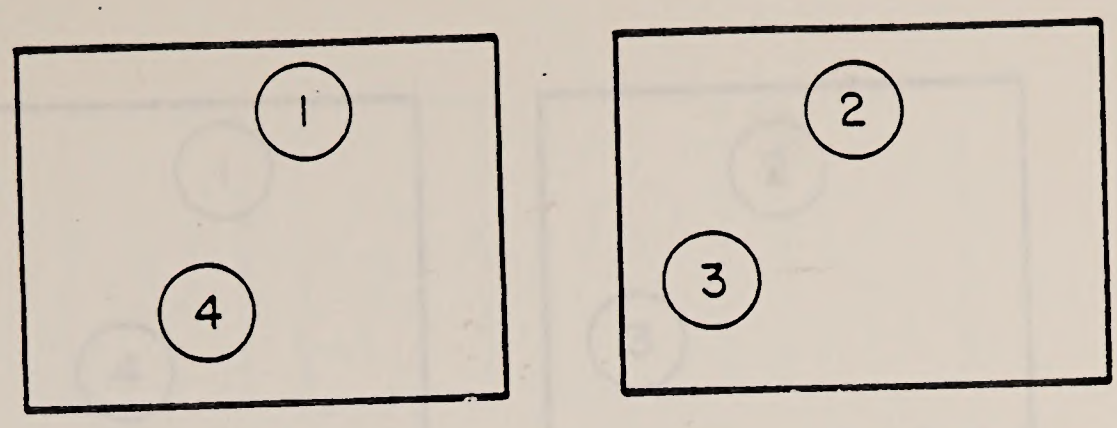


1st Floor

2nd Floor

AREA-BY-AREA ANALYSIS

Lewistown DO

3. Division of Mineral Resources

NEED:

This unit retrieves all information dealing with the fluids and solids program and may eventually input data. This office will track and report progress and maintain control for all district/resource mineral programs. This office will be responsible for verification and correction of all operational minerals inputs, depending upon future redelegation of responsibility from MSO. The terminal will also be used to access lease data for drainage cases, current lessee, bond holders, date of first production, unit and CA information, etc.

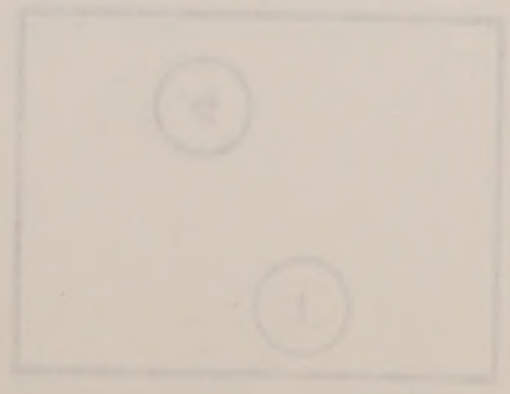
USERS: 12 Minerals Division personnel

VOLUME/USAGE: Estimated usage of the CRT is 4-5 hours each per day.

EXISTING EQUIPMENT: None

ADDITIONAL EQUIPMENT NEEDED: 1 CRT, 1 printer

Priority #1 - None
Priority #2 - 1 CRT, 1 printer
Priority #3 - None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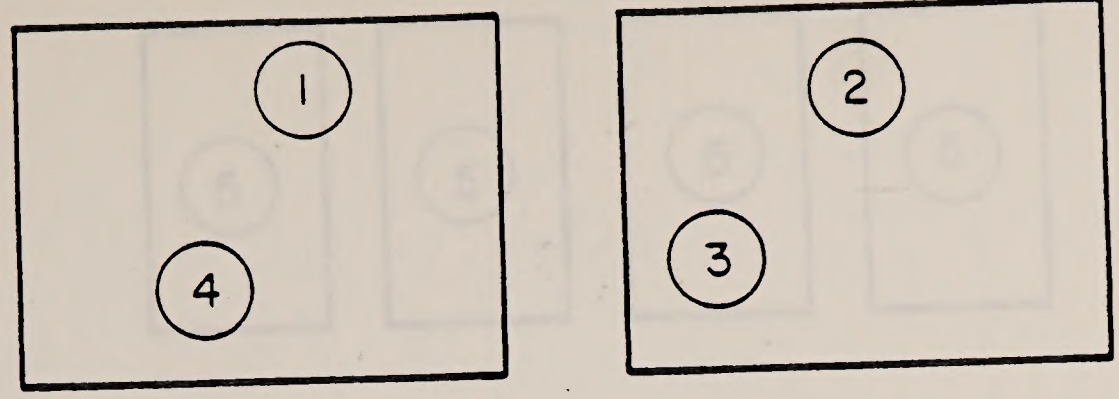

1st Floor

2nd Floor

AREA-BY-AREA ANALYSIS

Lewistown DO

4. Judith RA
(attached)

NEED:

This unit manages lease/permitting systems; manages BLM natural resource programs such as lands, minerals, grazing, wildlife, recreation, wilderness, timber, soil/water/air, etc. A resource area may regularly monitor land status for any of these programs, but especially for range, trespass, rights-of-way, wilderness, cultural and possibly ACEC management. If further decentralization occurs, staffs will enter interim actions on lands cases from reports or letters to and from applicants and other agencies along with pending action codes and verification of land status. The resource area responds to both public and interagency queries.

USERS: 9 Resource Specialists
Area Manager
The Public

VOLUME/USAGE: The CRT would be used 3-4 hours per day.

EXISTING EQUIPMENT: 1 CRT, 1 printer

ADDITIONAL EQUIPMENT NEEDED: None

Priority #1 - None
Priority #2 - None
Priority #3 - None

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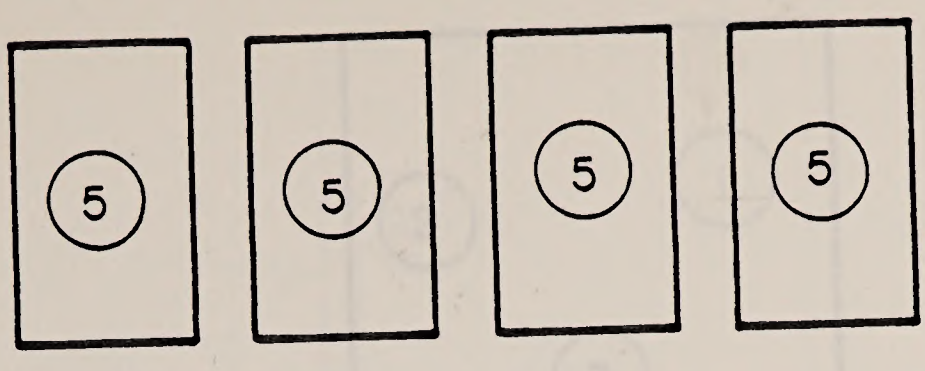


AREA-BY-AREA ANALYSIS

Lewistown DO

5. Detached RAs (4)
   Valley RA
   Phillips RA
   Havre RA
   Great Falls RA

NEED:

These units manage lease/permitting systems; manage BLM natural resource programs such as lands, minerals, grazing, wildlife, recreation, wilderness, timber, soil/water/air, etc. A resource area may regularly monitor land status for any of these programs, but especially for trespass, rights-of-way, wilderness, and possibly ACEC management. If further decentralization occurs, staff will enter interim actions on lands cases from reports or letters to and from applicants and other agencies along with pending action codes and verification of land status. The resource areas respond to both public and interagency queries. Public assistance is increasing daily in our Resource Areas.

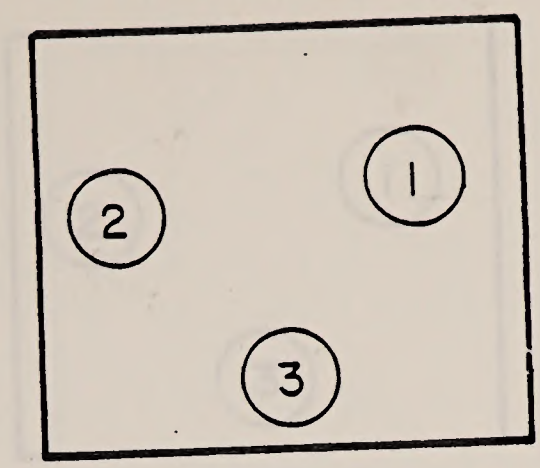
USERS: 42 Resource Specialists
       4 Area Manager
       The public

VOLUME/USAGE: The four CRTs will be used about 5-6 hours per day.

EXISTING EQUIPMENT: 4 CRTs, 4 printers

ADDITIONAL EQUIPMENT NEEDED:

Priority #1 - None
Priority #2 - None
Priority #3 - None



AREA-BY-AREA ANALYSIS

Dickinson DO

1. Administrative Area & Public Room

NEED:

This unit inputs all ALMRS applications filed at this location, trespass information, and mineral and timber sales. This office will track and report all District progress and maintain control of all cases and reports to and from this location. This office is responsible for verification and correction of all ALMRS inputs from the District and ALMRS orientation/ training for local staff. It responds to queries from other agencies and the public (over-the-counter, letter, or phone) on land status, pending applications, and other lands data. In the adjudicative process, the unit requests reports to identify prior filings and annotates ALMRS. The unit provides public assistance and education for public users of ALMRS equipment located in this area.

USERS: 1 Legal Clerk
The public

VOLUME/USAGE: Estimated usage of the CRT is 4-5 hours per day.

EXISTING EQUIPMENT: 1 CRT, 1 printer

ADDITIONAL EQUIPMENT NEEDED: 1 High-speed printer

Priority #1 - None
Priority #2 - 1 High-speed printer
Priority #3 - None

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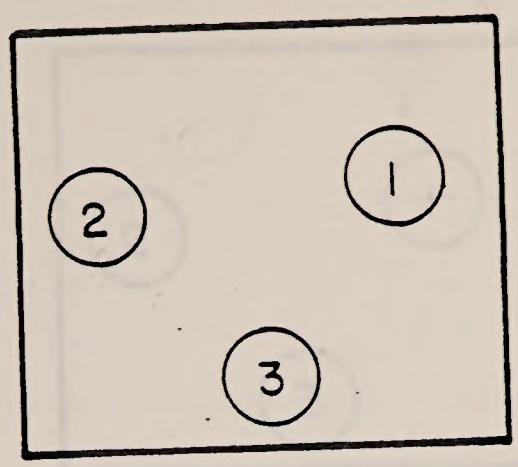


AREA-BY-AREA ANALYSIS

Dickinson DO

2. Division of Lands & Renewable Resources

NEED:

Monitors and updates specific ALMRS case types such as trespass, pending and authorized lands cases, etc. The unit has the potential for monitoring other natural resource management claims on public lands such as grazing leases, privileges; protected areas such as wilderness, ACEC, and natural areas; withdrawal reviews; managing cultural sites and encroachments; rights-of-way; activities/claims in key wildlife areas; timber sales/management; activities/claims affecting environmental concerns (air, water, soil, etc.). Adjudicative staff requests reports on lands cases to identify prior filings and updates ALMRS.

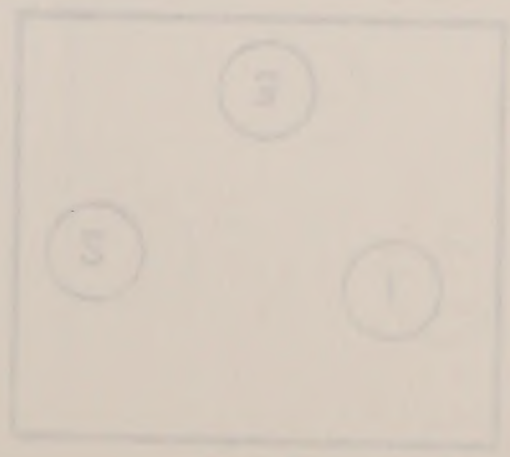
USERS: 7 Resource Specialists

VOLUME/USAGE: The CRT would be used 4-5 hours per day.

EXISTING EQUIPMENT: None

ADDITIONAL EQUIPMENT NEEDED: 1 CRT, 1 printer

Priority #1 - None
Priority #2 - 1 CRT, 1 printer
Priority #3 - None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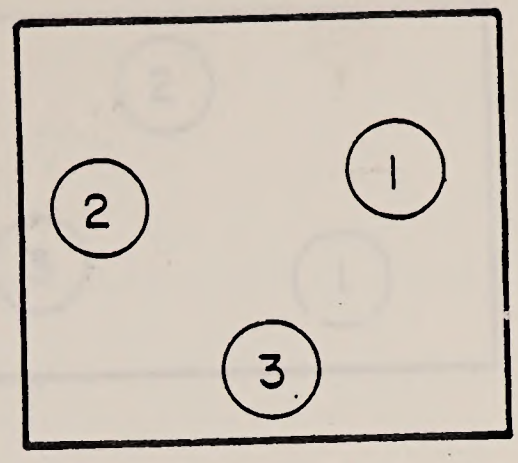


AREA-BY-AREA ANALYSIS

Dickinson DO

3. Division of Mineral Resources

NEED:

This unit retrieves all information dealing with the fluids and solids program and may eventually input data. This office will track and report progress and maintain control for all district/resource mineral programs. This office will be responsible for verification and correction of all operational minerals inputs, depending upon future redelegation of responsibility from MSO. The terminals will also be used to access lease data for drainage cases, current lessee, bond holders, date of first production, unit and CA information, etc.

USERS: 7 Minerals Division personnel

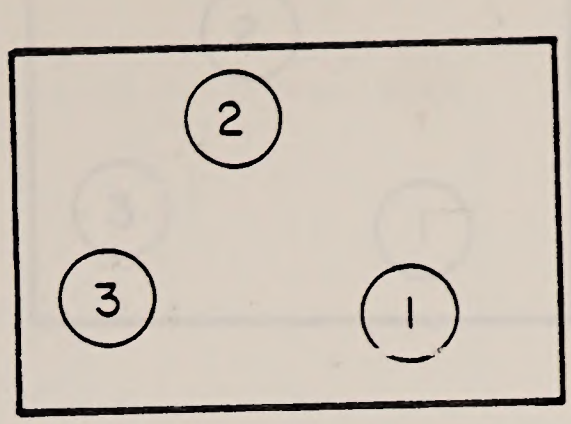
VOLUME/USAGE: Estimated usage of the 2 CRTs is 4-5 hours each per day

EXISTING EQUIPMENT: None

ADDITIONAL EQUIPMENT NEEDED: 2 CRTs, 1 printer

Priority #1 - 1 CRT, 1 printer
Priority #2 - None
Priority #3 - 1 CRT

3
2
1



AREA-BY-AREA ANALYSIS

Butte DO

1. Administrative Area &
   Public Room

NEED:

This unit inputs all ALMRS applications filed at this location, trespass information and mineral and timber sales. This office will track and report all District/Resource Area progress and maintain control of all cases and reports to and from this location. This office is responsible for verification and correction of all ALMRS inputs from the District and ALMRS orientation/ training for local staff. Responds to queries from other agencies and the public (over-the-counter, letter, or phone) on land status, pending applications, mining claims, and other lands data. In the adjudicative process, the unit requests reports to identify prior filings and annotates ALMRS. The unit provides public assistar , and education for public users of ALMRS equipment located in this area.

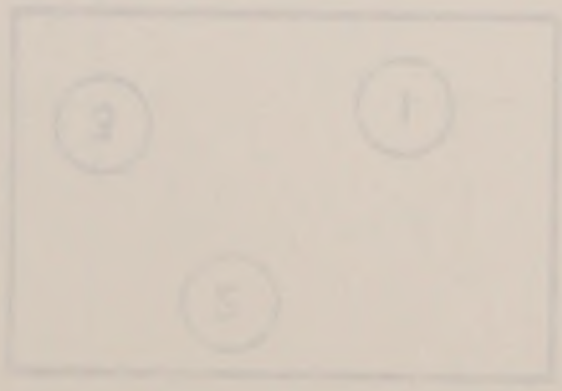
USERS: 1 Legal Clerk
The public

VOLUME/USAGE: Estimated usage of the CRT is 4-5 hours per day.

EXISTING EQUIPMENT: 1 CRT, 1 printer

ADDITIONAL EQUIPMENT NEEDED: 1 High-speed printer

Priority #1 - None
Priority #2 - 1 High-speed printer
Priority #3 - None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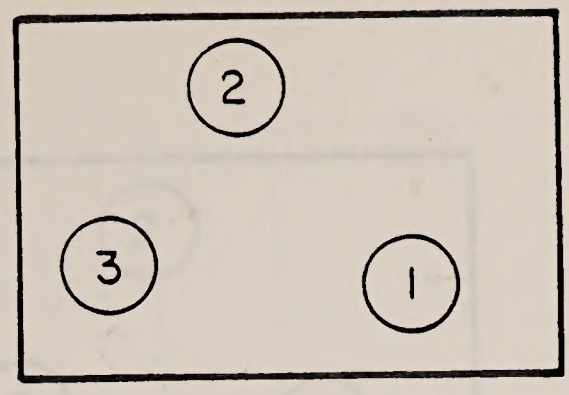
1
3



AREA-BY-AREA ANALYSIS

Butte DO

2. Division of Resource Management
   Division of Operations

NEED:

Monitors and updates specific ALMRS case types such as trespass, pending and authorized lands cases, etc. The unit has the potential for monitoring other natural resource management claims on public lands such as grazing leases, privileges; protected areas such as wilderness, ACEC, and natural areas; withdrawal reviews; managing cultural sites and encroachments; rights-of-way; activities/claims in key wildlife areas; timber sales/management; activities/claims affecting environmental concerns (air, water, soil, etc.). Adjudicative staff requests reports on land cases to identify prior filings and updates ALMRS. Retrieves mining claim data.

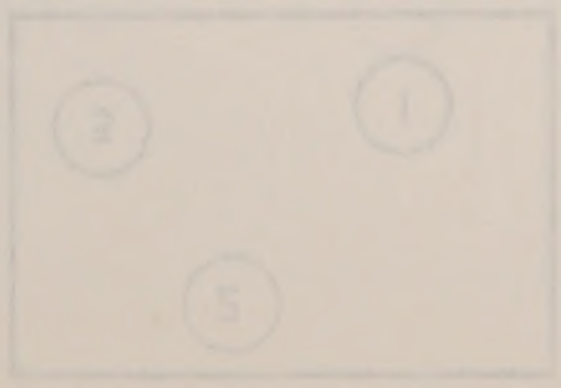
USERS: 17 Resource Specialists
1 Adjudicator/Realty Specialist
1 Land Law Assistant

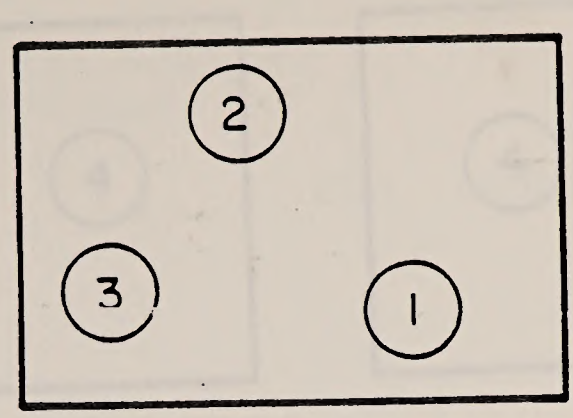
VOLUME/USAGE: The CRT would be used 4-5 hours per day.

EXISTING EQUIPMENT: None

ADDITIONAL EQUIPMENT NEEDED: 1 CRT, 1 printer

Priority #1 - None
Priority #2 - 1 CRT, 1 printer
Priority #3 - None


2
1
3



AREA-BY-AREA ANALYSIS

Butte DO

3. Headwaters RA
(attached)

NEED:

This unit manages lease/permitting systems; manages BLM natural resource programs such as lands, minerals, grazing, wildlife, recreation, wilderness, timber, soil/water/air, etc. A resource area may regularly monitor land status for any of these programs, but especially for range, trespass, rights-of-way, wilderness, cultural and possibly ACEC management. If further decentralization occurs, staff will enter interim actions on lands cases from reports or letters to and from applicants and other agencies along with pending action codes and verification of land status. The resource area responds to both public and interagency queries.

USERS: 9 Resource Specialists
Area Manager
The public

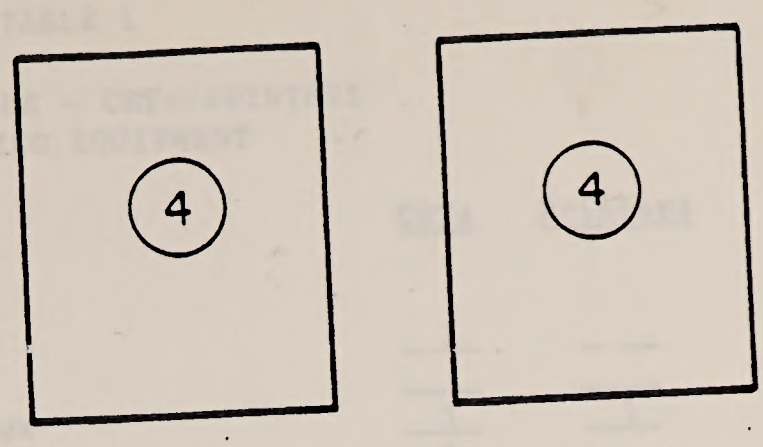
VOLUME/USAGE: The CRT would be used about 3-4 hours per day

EXISTING EQUIPMENT: None

ADDITIONAL EQUIPMENT NEEDED: 1 CRT, 1 Printer

Priority #1 - None
Priority #2 - None
Priority #3 - 1 CRT, 1 printer

2
1
3



AREA-BY-AREA ANALYSIS

Butte DO

4. Detached RAs (2)
   Dillon RA
   Garnet RA

NEED:

This unit manages lease/permitting systems; manages BLM natural resource programs such as lands, minerals, grazing, wildlife, recreation, wilderness, timber, soil/water/air, etc. A resource area may regularly monitor land status for any of these programs, but especially for range, trespass, rights-of-way, wilderness, cultural and possibly ACEC management. If further decentralization occurs, staff will enter interim actions on lands cases from reports or letters to and from applicants and other agencies along with pending action codes and verification of land status. The resource area responds to both public and interagency queries.

USERS: 33 Resource Specialists
Area Manager
The public

VOLUME/USAGE: The two CRTs would be used about 3-4 hours each per day

EXISTING EQUIPMENT: 1 CRT, 1 printer

ADDITIONAL EQUIPMENT NEEDED: 1 CRT, 1 Printer

Priority #1 - 1 CRT, 1 printer
Priority #2 - None
Priority #3 - None

TABLE 1

SUMMARY TABLE - CRTs/PRINTERS
EXISTING EQUIPMENT

Office/Location/Prime Users		CRTs	Printers
MSO			
2nd Floor -	1. - Accounts	1	- -
	2. - Docket	—	—
	3. - Records Assistance	1	1
	4. - Public Room	1	—
	5. - Acreage Inventory	—	—
3rd Floor -	6. - Fluids Adjudication	10	4
	7. - Agreements & Eval. Sec. and Eval. & Regs. Sec.	—	—
	8. - Solid Min. Adjudication	3	1
4th Floor -	9. - Lands & Renewable Res.	2	1
6th Floor -	10. - Title Section (Survey)	—	—
7th Floor -	11. - Mining Regulation Sec. and Min. Development Sec.	—	—
	12. - ADP	1	—
Annex	13. - Division of Operations	—	—
MILES CITY DO			
	1. - Admin./Public Room	—	—
	2. - Lands & Renewable Res.	1	1
	3. - Div. of Min. Resources	—	—
	4. - BDRA/PRRA (detached)	1	1
	5. - Billings RA (detached)	1	1
	6. - SDRA (detached)	—	—
LEWISTOWN DO			
1st Floor -	1. - Admin./Public Room	1	1
2nd Floor -	2. - Lands & Renewable Res.	—	—
	3. - Div. of Min. Resources	—	—
1st Floor -	4. - Judith RA (attached)	1	1
	5. - RA (4) (detached)	4	4
DICKINSON DO			
	1. - Admin./Public Room	1	1
	2. - Lands & Renewable Res.	—	—
	3. - Div. of Min. Resources	—	—
BUTTE DO			
	1. - Admin./Public Room	1	1
	2. - Div. of Res. Mgmt. & Div. of Operations	—	—
	3. - Headwaters RA (attached)	—	—
	4. - Dillon RA (detached)	—	—
	Garnet RA (detached)	1	1
	TOTAL	31	19

TABLE 2

SUMMARY TABLE - CRT/PRINTER NEEDS
PRIORITY 1 PROCUREMENT

Office/Location/Prime Users		CRTs	Printers
MSO			
2nd Floor -	1. - Accounts	—	—
	2. - Docket	1	—
	3. - Records Assistance	2	1*
	4. - Public Room	4	—
	5. - Acreage Inventory	1	—
3rd Floor -	6. - Fluids Adjudication	1	—
	7. - Agreements & Eval. Sec. and Eval. & Regs. Sec.	—	—
	8. - Solid Min. Adjudication	—	—
4th Floor -	9. - Lands & Renewable Res.	—	—
6th Floor -	10. - Title Section (Survey)	2	—
7th Floor -	11. - Mining Regulation Sec. and Min. Development Sec.	—	—
	12. - ADP	2	—
	13. - Division of Operations	1	1
Annex			
MILES CITY DO			
	1. - Admin./Public Room	—	—
	2. - Lands & Renewable Res.	—	—
	3. - Div. of Min. Resources	1	1
	4. - BDRA/PRRA (detached)	—	—
	5. - Billings RA (detached)	—	—
	6. - SDRA (detached)	1	1
LEWISTOWN DO			
1st Floor -	1. - Admin./Public Room	—	—
2nd Floor -	2. - Lands & Renewable Res.	—	—
	3. - Div. of Min. Resources	—	—
1st Floor -	4. - Judith RA (attached)	—	—
	5. - RA (4) (detached)	—	—
DICKINSON DO			
	1. - Admin./Public Room	—	—
	2. - Lands & Renewable Res.	—	—
	3. - Div. of Min. Resources	1	1
BUTTE DO			
	1. - Admin./Public Room	—	—
	2. - Div. of Res. Mgmt. & Div. of Operations	—	—
	3. - Headwaters RA (attached)	—	—
	4. - Dillon RA (detached)	1	1
	Garnet RA (detached)	—	—
	TOTAL	18	6

*High Speed Printer

TABLE 3

SUMMARY TABLE - CRT/PRINTER NEEDS
PRIORITY 2 PROCUREMENT

Office/Location/Prime Users		CRTs	Printers
MSO			
2nd Floor -	1. - Accounts	—	—
	2. - Docket	1	1
	3. - Records Assistance	1	—
	4. - Public Room	4	—
	5. - Acreage Inventory	—	—
3rd Floor -	6. - Fluids Adjudication	2	1
	7. - Agreements & Eval. Sec. and Eval. & Regs. Sec.	—	—
	8. - Solid Min. Adjudication	2	1**
4th Floor -	9. - Lands & Renewable Res.	1	—
6th Floor -	10. - Title Section (Survey)	1	1
7th Floor -	11. - Mining Regulation Sec. and Min. Development Sec.	1	1
	12. - ADP	1	—
Annex	13. - Division of Operations	—	—
MILES CITY DO			
	1. - Admin./Public Room	1	1
	2. - Lands & Renewable Res.	—	1*
	3. - Div. of Min. Resources	1	—
	4. - BDRA/PRRA (detached)	—	—
	5. - Billings RA (detached)	—	—
	6. - SDRA (detached)	—	—
LEWISTOWN DO			
1st Floor -	1. - Admin./Public Room	1	1*
2nd Floor -	2. - Lands & Renewable Res.	1	1
	3. - Div. of Min. Resources	1	1
1st Floor -	4. - Judith RA (attached)	—	—
	5. - RA (4) (detached)	—	—
DICKINSON DO			
	1. - Admin./Public Room	—	1*
	2. - Lands & Renewable Res.	1	1
	3. - Div. of Min. Resources	—	—
BUTTE DO			
	1. - Admin./Public Room	—	1*
	2. - Div. of Res. Mgmt. & Div. of Operations	1	1
	3. - Headwaters RA (attached)	—	—
	4. - Dillon RA (detached)	—	—
	Garnet RA (detached)	—	—
	TOTAL	21	14

* High Speed Printer
**This High Speed Printer will not be needed if the Solid Minerals Adjudication Section does not move to 7th Floor.

TABLE 4

SUMMARY TABLE - CRT/PRINTER NEEDS
PRIORITY 3 PROCUREMENT

Office/Location/Prime Users		CRTs	Printers
MSO			
2nd Floor -	1. - Accounts	—	—
	2. - Docket	—	—
	3. - Records Assistance	2	—
	4. - Public Room	4	—
	5. - Acreage Inventory	—	—
3rd Floor -	6. - Fluids Adjudication	2	—
	7. - Agreements & Eval. Sec. and Eval. & Regs. Sec.	1	—
	8. - Solid Min. Adjudication	3	1
4th Floor -	9. - Lands & Renewable Res.	1	—
6th Floor -	10. - Title Section (Survey)	3*	—
7th Floor -	11. - Mining Regulation Sec. and Min. Development Sec.	—	—
	12. - ADP	—	—
Annex	13. - Division of Operations	—	—
MILES CITY DO			
	1. - Admin./Public Room	—	—
	2. - Lands & Renewable Res.	—	—
	3. - Div. of Min. Resources	1	1
	4. - BDRA/PRRA (detached)	1	1
	5. - Billings RA (detached)	1	1
	6. - SDRA (detached)	—	—
LEWISTOWN DO			
1st Floor -	1. - Admin./Public Room	—	—
2nd Floor -	2. - Lands & Renewable Res.	—	—
	3. - Div. of Min. Resources	—	—
1st Floor -	4. - Judith RA (attached)	—	—
	5. - RA (4) (detached)	—	—
DICKINSON DO			
	1. - Admin./Public Room	—	—
	2. - Lands & Renewable Res.	—	—
	3. - Div. of Min. Resources	1	—
BUTTE DO			
	1. - Admin./Public Room	—	—
	2. - Div. of Res. Mgmt. & Div. of Operations	—	—
	3. - Headwaters RA (attached)	1	1
	4. - Dillon RA (detached)	—	—
	Garnet RA (detached)	—	—
	TOTAL	21	5

* If status is contracted, these CRTs may not be needed. When survey input is completed, a terminal will be transferred to the Division of Operations.

TABLE 5

SUMMARY TABLE - CRT/PRINTER NEEDS
TOTAL PROCUREMENT

Office/Location/Prime Users		CRTs	Printers
MSO			
2nd Floor -	1. - Accounts	—	—
	2. - Docket	2	1
	3. - Records Assistance	5	1*
	4. - Public Room	12	—
	5. - Acreage Inventory	1	—
3rd Floor -	6. - Fluids Adjudication	5	1
	7. - Agreements & Eval. Sec. and Eval. & Regs. Sec.	1	—
		5	2**
	8. - Solid Min. Adjudication	2	—
4th Floor -	9. - Lands & Renewable Res.	6***	1
6th Floor -	10. - Title Section (Survey)	1	1
7th Floor -	11. - Mining Regulation Sec. and Min. Development Sec.	3	—
	12. - ADP	1	1
Annex	13. - Division of Operations		
MILES CITY DO			
	1. - Admin./Public Room	1	1
	2. - Lands & Renewable Res.	—	1*
	3. - Div. of Min. Resources	3	2
	4. - BDRA/PRRA (detached)	1	1
	5. - Billings RA (detached)	1	1
	6. - SDRA (detached)	1	1
LEWISTOWN DO			
1st Floor -	1. - Admin./Public Room	1	1*
2nd Floor -	2. - Lands & Renewable Res.	1	1
	3. - Div. of Min. Resources	1	1
1st Floor -	4. - Judith RA (attached)	—	—
	5. - RA (4) (detached)	—	—
DICKINSON DO			
	1. - Admin./Public Room	—	1*
	2. - Lands & Renewable Res.	1	1
	3. - Div. of Min. Resources	2	1
BUTTE DO			
	1. - Admin./Public Room	—	1*
	2. - Div. of Res. Mgmt. & Div. of Operations	1	1
	3. - Headwaters RA (attached)	1	1
	4. - Dillon RA (detached)	1	1
	Garnet RA (detached)	—	—
	TOTAL	60	25

* High Speed Printer
** One of these 2 printers is a high speed printer and will not be needed if Section does not move to 7th Floor.
***Three CRTs may not be needed if status is contracted.

ADP AND TELECOMMUNICATIONS EQUIPMENT ANALYSIS

ADP and telecommunications procurement is prioritized in the same order as equipment needs to support ALMRS in Montana. They exactly support ALMRS objectives in each priority.

Figures 1 through 4 on the following pages present the types of changes anticipated by priority. Figure 4, the telecommunications diagram for Priority 3, indicates the final optimum configuration required to support ALMRS as described in the "Assumptions" section (pp. 4-5). All four figures display the number of data lines available, CRT and printer availability based on the cumulative need by office location, multiplexer-modem (mux-modem) upgrades, and new configurations within the State Office. Refer to all four diagrams when reading the narrative analysis below.

Three summary tables in the same format as those in the equipment need analysis (CRTs and printers) section describe total needs. These tables may be used to see total and component costs of each priority.

Priority 1

In 1984 Montana management made the decision to duplicate the ALMRS data base on the State Office Level 6 and adopt the Oregon Case Access System (ORCA). ORCA was brought on line in Montana in August 1984. To support ORCA, an additional Mass Storage Unit (MSU) is needed to handle the large volume of data. In 1985 Montana is also going to combine the ALMRS/ORCA data base with the mining claims data base and run one integrated system. Purchase of this MSU is necessary to make ORCA and the integrated mining claim data base work in Montana. Total cost is $40,000.

Additional ADP equipment needed in the Montana State Office to support this priority includes ADP wiring connections and installation of another Multiple Line Communications Processor (MLCP) on the Level 6 to increase port capacity from 32 to 48 lines. Estimated cost is $10,000.

One high speed printer would be purchased under this priority for the Public Room/Records Assistance Section to facilitate the high volume of printing for the public. The cost would be $15,000. Cost of CRTs and printers has not been included in the total figures for this analysis.

In anticipation of the increased Terminal Usage in the Districts, Montana purchased multiplexors for each District Office in 1984 with other program funds. However, under this priority it will be necessary to purchase a matrix switch for $9000 and a Multiple Device Coupler (MDC) for $2500 to accommodate the initial increase in terminals and printers.

Wiring needs total $2000. Two (212) modems are needed for the South Dakota and Dillon Resource Areas. Also, one modem is needed for the Operations Division because they are not co-located with the State Office. Total cost for three modems will be $1500. Two short-haul modems are needed for each CRT and high speed printer in Priority 1 (16 pair x $200 = $3200).

Other needed equipment such as modems and wiring have been purchased by other program funds.

All CRTs and printers purchased under this priority would need maintenance contracts. The estimated contract would be $5000. This is based on $150/year maintenance on each terminal, $300/year on each printer and $800/year for each high speed printer (18 x $150) + (5 x $300) + (1 x $800) = $5000.

Total cost to support Priority 1 would be: $73,200: $50,000 of ADP upgrades, $18,200 of telecommunications upgrades, and $5000 in CRT/printer maintenance.

Priority 2

To increase the State and District Office capability, further telecommunications upgrades will be needed. Miles City and Lewistown District Offices will need their multiplexors increased from 8 to 16 ports each ($2000 each); and Dickinson District Office will need its multiplexor increased from 4 to 8 ports ($1000). The State Office matrix switch will have to be upgraded for $2000 along with another Multiple Device Coupler for $2750.

Additionally, new telephone wiring will be needed to support the upgrades in the State Office amounting to $2000 and another $1500 in the Districts. Short-haul modems will be required for each CRT and high speed printer in both the State and District Offices. This would amount to $5200 for 26 pair based on a price of $200/pair (21 CRTs plus 5 high speed printers = 26 pair of modems).

Five high speed printers would be purchased in this priority to accommodate the higher volume needs of the State and District Offices. The printers would be 300 lines/minute (about six pages per minute). Costs for printers and CRTs have not been shown, but it is estimated it would cost $15,000 per printer based on today's prices. As a point of comparison, the other low speed printers would cost about $3000, be slaved to CRTs and print a minimum of 120 characters per second or about one page per minute.

All CRTs and printers purchased in this priority would need maintenance contracts. The estimated contract would be $10,935. This figure is based on $165/year maintenance on each terminal, $330/year on each printer and $900/year for each high speed printer (21 x $165) + (9 x $330) + (5 x $900) = $10,935. Yearly maintenance costs were increased by 10% over Priority 1.

Total cost to support Priority 2 would be $29,385: $18,450 for telecommunications upgrades and $10,935 for CRT/printer maintenance.

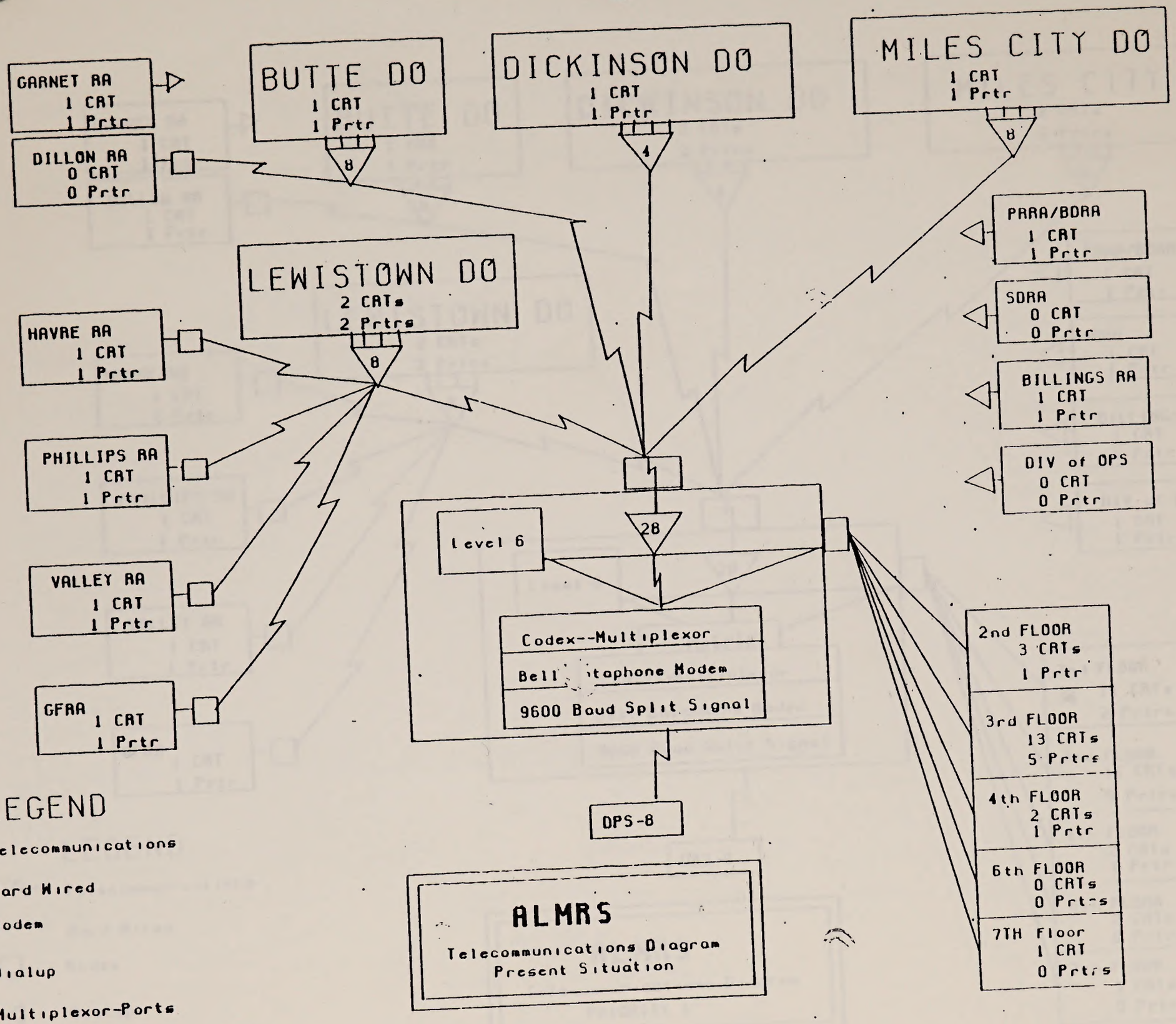
Priority 3

Priority 3 provides for full implementation of tracking and querying systems. Telecommunications needs include upgrading the matrix switch for $2000 and another $2000 for wiring needs in the State Office. In the Butte District Office upgrading of the multiplexor from 8 to 16 ports will be necessary ($2000) along with $500 for wiring. Short-haul modems will be required for 19 terminals totaling $3800 for 19 pair.

Two (212) modems will be required for the Big Dry, Powder River and Billings Resource Areas because they are detached from the Miles City District Office. Total cost will be $1000 for the two modems.

All CRTs and printers purchased in this priority would need maintenance contracts. The estimated contract would be $5580. This figure is based on $180/year maintenance on each terminal and $360/year on each printer (21 x $180) + (5 x $360) = $5580. Yearly maintenance costs were increased by 10% over Priority 2.

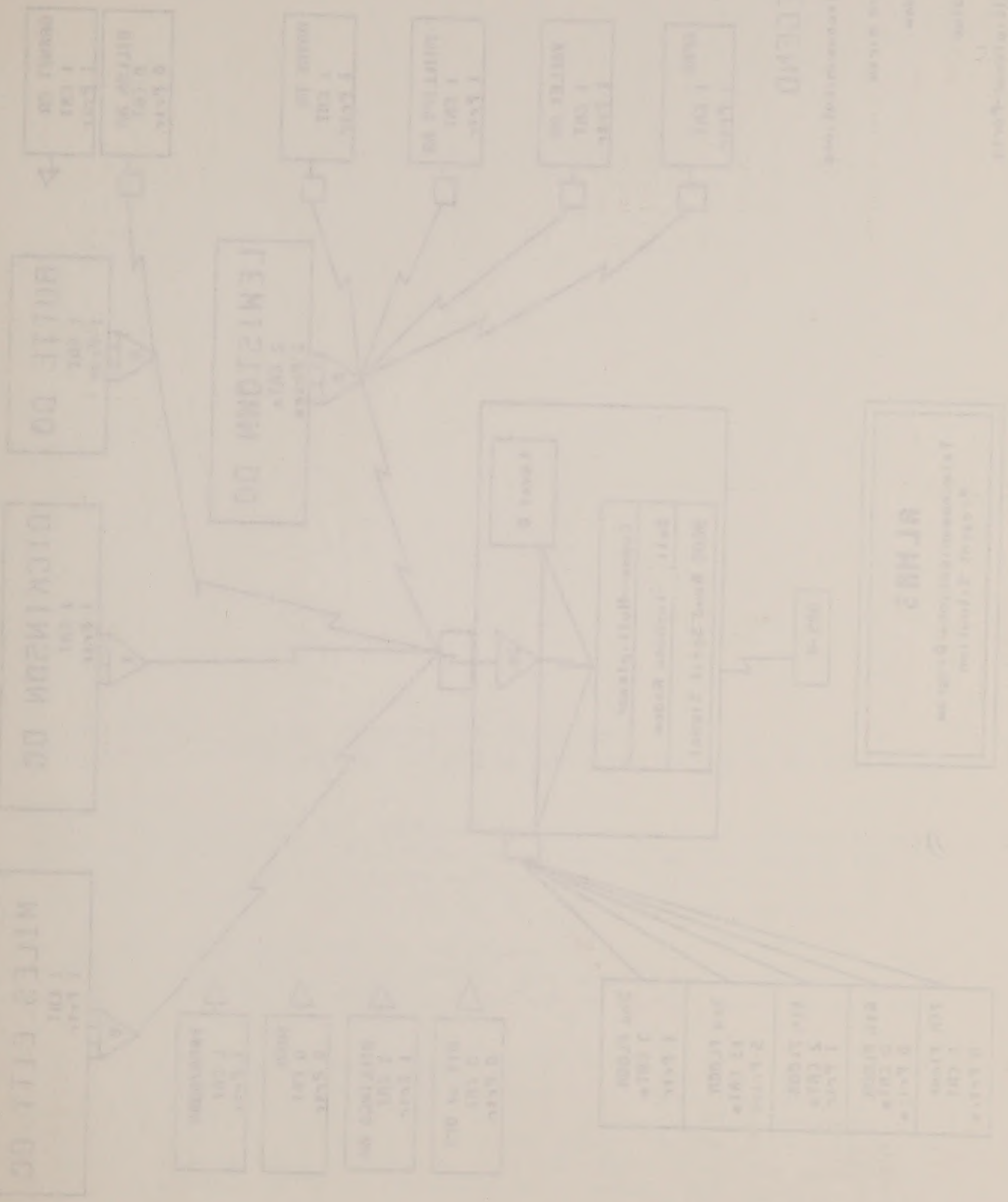
Total cost to support Priority 3 would be $16,880: $11,300 in telecommunications upgrades and $5580 in CRT/printer maintenance.

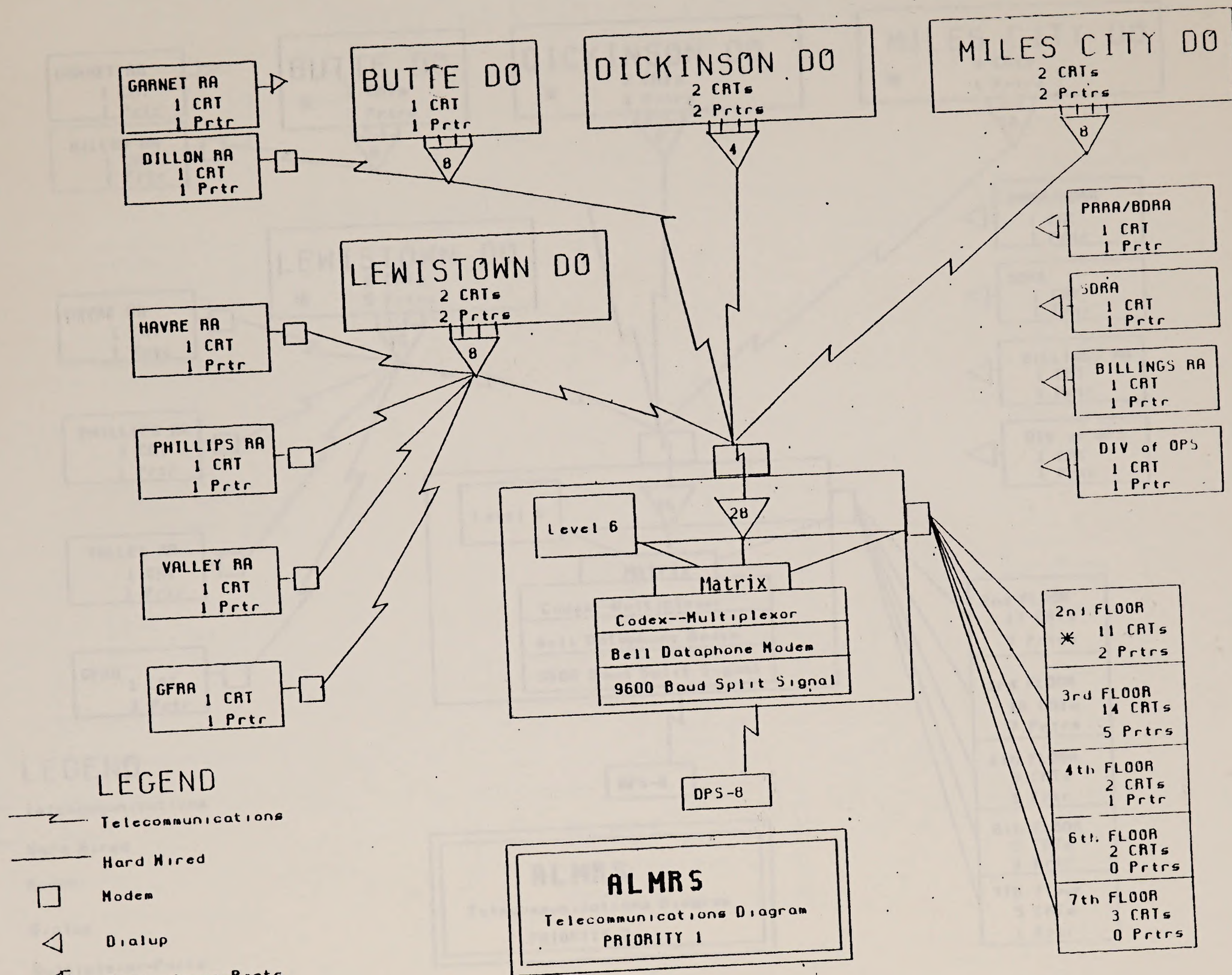


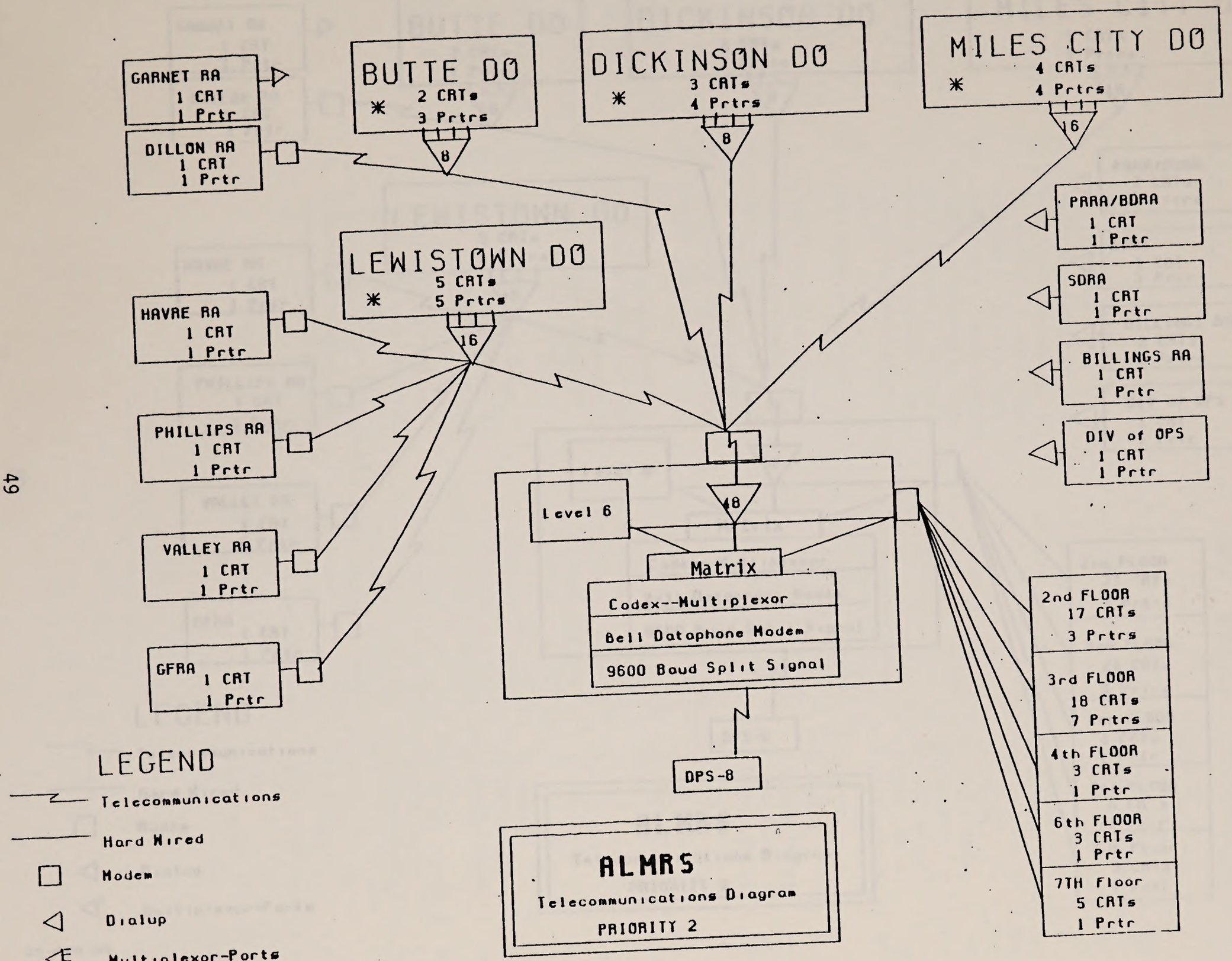
LEGEND

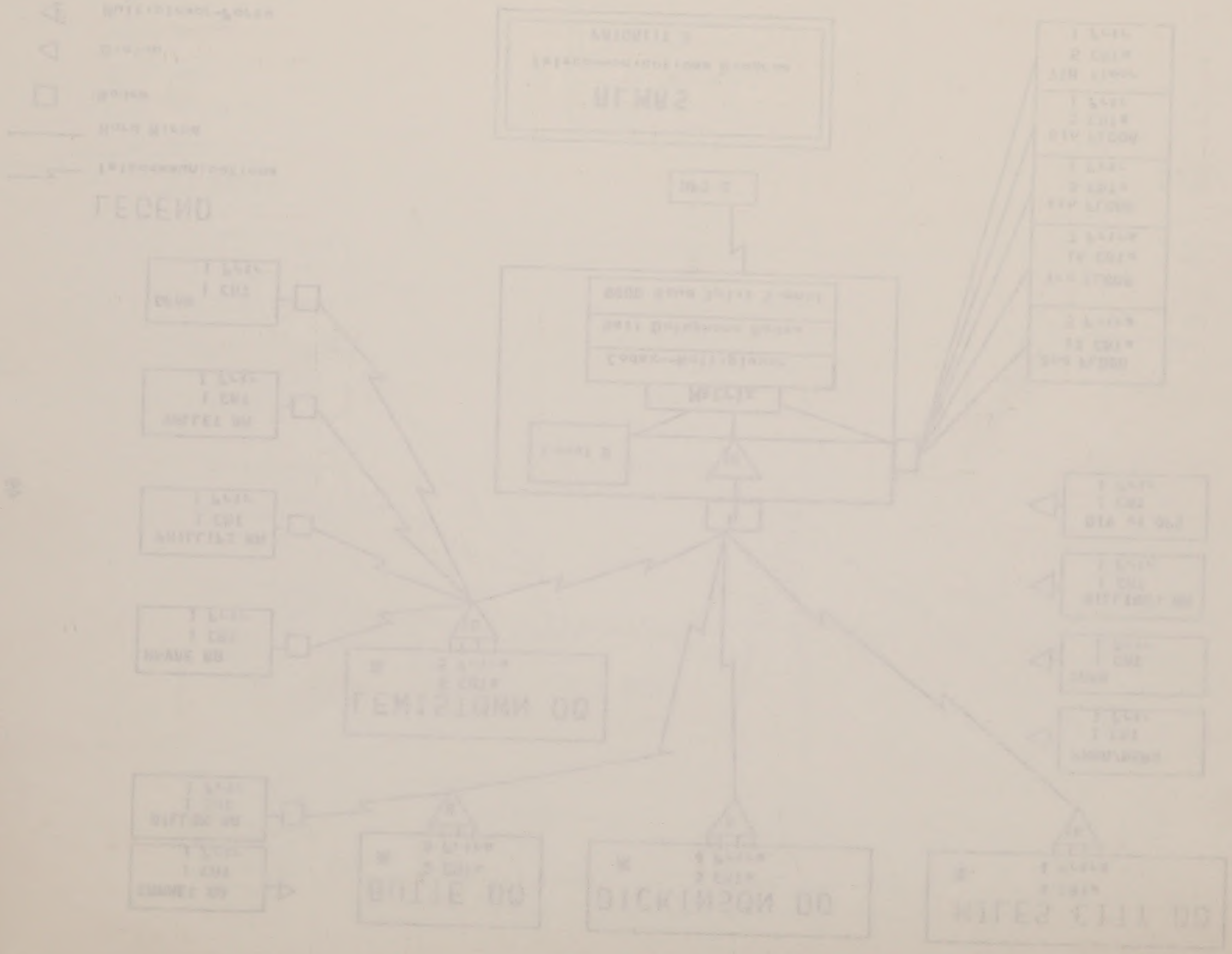
- Telecommunications
- Hard Wired
- Modem
- Dialup
- Multiplexor-Ports

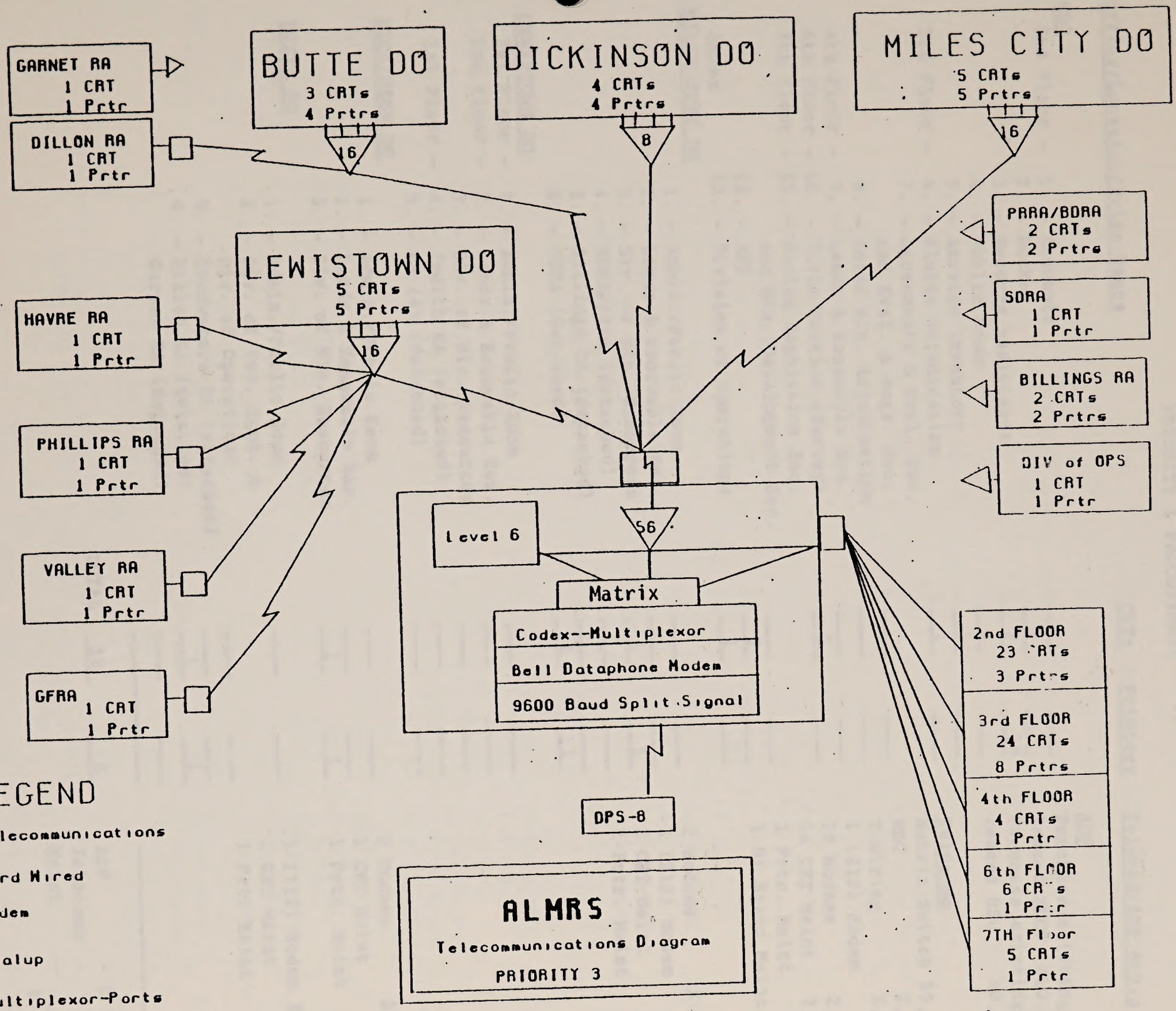
22-FEB-85




GARNET RA
1 CRT
1 Prtr
DILLON RA
1 CRT
1 Prtr
BUTTE DO
1 CRT
1 Prtr
8
DICKINSON DO
2 CRTs
2 Prtrs
4
MILES CITY DO
2 CRTs
2 Prtrs
8
PRRA/BDRA
1 CRT
1 Prtr
SDRA
1 CRT
1 Prtr
BILLINGS RA
1 CRT
1 Prtr
DIV of OPS
1 CRT
1 Prtr
LEWISTOWN DO
2 CRTs
2 Prtrs
8
HAVRE RA
1 CRT
1 Prtr
PHILLIPS RA
1 CRT
1 Prtr
VALLEY RA
1 CRT
1 Prtr
GFRA
1 CRT
1 Prtr
Level 6
28
Matrix
Codex--Multiplexor
Bell Dataphone Modem
9600 Baud Split Signal
DPS-8
2nd FLOOR
* 11 CRTs
2 Prtrs
3rd FLOOR
14 CRTs
5 Prtrs
4th FLOOR
2 CRTs
1 Prtr
6th FLOOR
2 CRTs
0 Prtrs
7th FLOOR
3 CRTs
0 Prtrs
ALMRS
Telecommunications Diagram
PRIORITY 1
LEGEND
Telecommunications
Hard Wired
Modem
Dialup
Multiplexor-Ports
* High Speed Prtr This Priority


GARNET RA
1 CRT
1 Prtr
DILLON RA
1 CRT
1 Prtr
BUTTE DO
* 2 CRTs
3 Prtrs
8
DICKINSON DO
* 3 CRTs
4 Prtrs
8
MILES CITY DO
4 CRTs
* 4 Prtrs
16
PRRA/BDRA
1 CRT
1 Prtr
SDRA
1 CRT
1 Prtr
BILLINGS RA
1 CRT
1 Prtr
DIV of OPS
1 CRT
1 Prtr
LEWISTOWN DO
5 CRTs
* 5 Prtrs
16
HAVRE RA
1 CRT
1 Prtr
PHILLIPS RA
1 CRT
1 Prtr
VALLEY RA
1 CRT
1 Prtr
GFRA
1 CRT
1 Prtr
Level 6
48
Matrix
Codex--Multiplexor
Bell Datophone Modem
9600 Baud Split Signal
DPS-8
2nd FLOOR
17 CRTs
3 Prtrs
3rd FLOOR
18 CRTs
7 Prtrs
4th FLOOR
3 CRTs
1 Prtr
6th FLOOR
3 CRTs
1 Prtr
7TH Floor
5 CRTs
1 Prtr
LEGEND
Telecommunications
Hard Wired
Modem
Dialup
Multiplexor-Ports
* High Speed Prtr This Priority
ALMRS
Telecommunications Diagram
PRIORITY 2




GARNET RA
1 CRT
1 Prtr
DILLON RA
1 CRT
1 Prtr
BUTTE DO
3 CRTs
4 Prtrs
16
DICKINSON DO
4 CRTs
4 Prtrs
8
MILES CITY DO
5 CRTs
5 Prtrs
16
PRRA/BDRA
2 CRTs
2 Prtrs
SDRA
1 CRT
1 Prtr
BILLINGS RA
2 CRTs
2 Prtrs
DIV of OPS
1 CRT
1 Prtr
LEWISTOWN DO
5 CRTs
5 Prtrs
16
HAVRE RA
1 CRT
1 Prtr
PHILLIPS RA
1 CRT
1 Prtr
VALLEY RA
1 CRT
1 Prtr
GFRA
1 CRT
1 Prtr
Level 6
56
Matrix
Codex--Multiplexor
Bell Dataphone Modem
9600 Baud Split Signal
DPS-8
2nd FLOOR
23 CRTs
3 Prtrs
3rd FLOOR
24 CRTs
8 Prtrs
4th FLOOR
4 CRTs
1 Prtr
6th FLOOR
6 CRTs
1 Prtr
7TH Floor
5 CRTs
1 Prtr
LEGEND
Telecommunications
Hard Wired
Modem
Dialup
Multiplexor-Ports
ALMRS
Telecommunications Diagram
PRIORITY 3
22-FEB-85

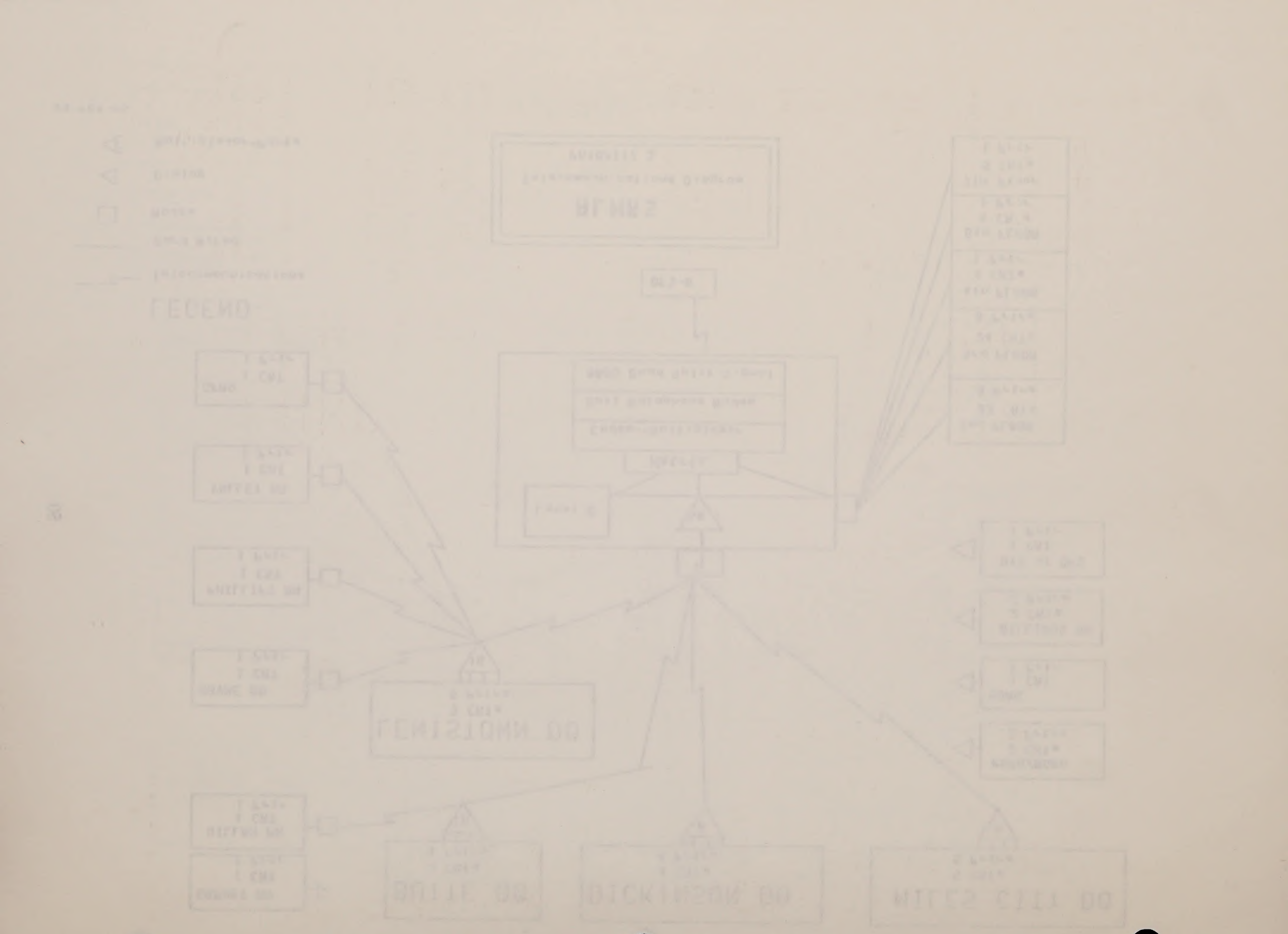


TABLE 6

SUMMARY TABLE - TELECOMMUNICATIONS/ADP NEEDS
PRIORITY 1 PROCUREMENT

Office/Location/Prime Users		CRTs	Printers	Telecom/ADP Equip
MSO				**ADP**
2nd Floor -	1. - Accounts	—	—	Purchase existing
	2. - Docket	1	—	leased MLCP $10,000
	3. - Records Assistance	2	1*	Purchase existing
	4. - Public Room	4	—	leased MSU 40,000
	5. - Acreage Inventory	1	—	
3rd Floor -	6. - Fluids Adjudication	1	—	**Telecomm**
	7. - Agreements & Eval. Sec. and Eval. & Regs. Sec.	—	—	Matrix Switch $9,000 MDC 2,500
	8. - Solid Min. Adjudication	—	—	T-Wiring 2,000
4th Floor -	9. - Lands & Renewable Res.	—	—	1 (212) Modem 500
6th Floor -	10. - Title Section (Survey)	2	—	28 Modems 2,800
7th Floor -	11. - Mining Regulation Sec. and Min. Development Sec.	—	—	14 CRT Maint 2,100 1 Prtr. Maint 300
	12. - ADP	2	—	1 Hi Speed Maint 800
Annex	13. - Division of Operations	1	1	
MILES CITY DO				
	1. - Admin./Public Room	—	—	2 Modems $ 200
	2. - Lands & Renewable Res.	—	—	1 (212) Modem 500
	3. - Div. of Min. Resources	1	1	2 CRT Maint 300
	4. - BDRA/PRRA (detached)	—	—	2 Prtr. Maint 600
	5. - Billings RA (detached)	—	—	
	6. - SDRA (detached)	1	1	
LEWISTOWN DO				
1st Floor -	1. - Admin./Public Room	—	—	
2nd Floor -	2. - Lands & Renewable Res.	—	—	
	3. - Div. of Min. Resources	—	—	
1st Floor -	4. - Judith RA (attached)	—	—	
	5. - RA (4) (detached)	—	—	
DICKINSON DO				2 Modems $ 200
	1. - Admin./Public Room	—	—	1 CRT Maint 150
	2. - Lands & Renewable Res.	—	—	1 Prtr. Maint 300
	3. - Div. of Min. Resources	1	1	
BUTTE DO				1 (212) Modem $ 500
	1. - Admin./Public Room	—	—	1 CRT Maint 150
	2. - Div. of Res. Mgmt. & Div. of Operations	—	—	1 Prtr Maint 300
	3. - Headwaters RA (attached)	—	—	
	4. - Dillon RA (detached)	1	1	
	Garnet RA (detached)	—	—	
	TOTAL	18	6	ADP - $ 50,000 Telecomm - 18,200 Maint - 5,000 $ 73,200

*High Speed Printer

TABLE 7

SUMMARY TABLE - TELECOMMUNICATIONS/ADP NEEDS
PRIORITY 2 PROCUREMENT

Office/Location/Prime Users	CRTs	Printers	Telecom/ADP Equip
MSO			Matrix Switch Upgrade- $ 2,000
2nd Floor - 1. - Accounts	—	—	
2. - Docket	1	1	MDC 2,750
3. - Records Assistance	1	—	T-Wiring 2,000
4. - Public Room	4	—	30 Modems 3,000
5. - Acreage Inventory	—	—	14 CRT Maint 2,310
3rd Floor - 6. - Fluids Adjudication	2	1	4 Prtr. Maint 1,320
7. - Agreements & Eval. Sec. and Eval. & Regs. Sec.	—	—	1 Hi Speed Maint 900
8. - Solid Min. Adjudication	2	1**	
4th Floor - 9. - Lands & Renewable Res.	1	—	
6th Floor - 10. - Title Section (Survey)	1	1	
7th Floor - 11. - Mining Regulation Sec. and Min. Development Sec.	1	1	
12. - ADP	1	—	
Annex 13. - Division of Operations	—	—	
MILES CITY DO			
1. - Admin./Public Room	1	1	Upgrade MUX $ 2,000
2. - Lands & Renewable Res.	—	1*	T-Wiring 500
3. - Div. of Min. Resources	1	—	6 Modems 600
4. - BDRA/PRRA (detached)	—	—	2 CRT Maint 330
5. - Billings RA (detached)	—	—	1 Prtr. Maint 330
6. - SDRA (detached)	—	—	1 Hi Speed Maint 900
LEWISTOWN DO			
1st Floor - 1. - Admin./Public Room	1	1*	Upgrade MUX $ 2,000
2nd Floor - 2. - Lands & Renewable Res.	1	1	T-Wiring 500
3. - Div. of Min. Resources	1	1	8 Modems 800
1st Floor - 4. - Judith RA (attached)	—	—	3 CRT Maint 495
5. - RA (4) (detached)	—	—	2 Prtr Maint 660
			1 Hi Speed Maint 900
DICKINSON DO			
1. - Admin./Public Room	—	1*	Upgrade MUX $ 1,000
2. - Lands & Renewable Res.	1	1	T-Wiring 500
3. - Div. of Min. Resources	—	—	4 Modems 400
			1 CRT Maint 165
			1 Prtr Maint 330
			1 Hi Speed Maint 900
BUTTE DO			
1. - Admin./Public Room	—	1*	4 Modems $ 400
2. - Div. of Res. Mgmt. & Div. of Operations	1	1	1 CRT Maint 165
3. - Headwaters RA (attached)	—	—	1 Prtr Maint 330
4. - Dillon RA (detached)	—	—	1 Hi Speed Maint 900
Garnet RA (detached)	—	—	
TOTAL	21	14	Telecomm - $ 18,450
			Maint 10,935
			$ 29,385

* High Speed Printer
**This High Speed Printer will not be needed if the Solid Minerals Adjudication Section does not move to 7th Floor.

TABLE 8

SUMMARY TABLE - TELECOMMUNICATIONS/ADP NEEDS
PRIORITY 3 PROCUREMENT

Office/Location/Prime Users	CRTs	Printers	Telecom/ADP Equip	
MSO			Upgrade Matrix Switch	$2000
2nd Floor - 1. - Accounts	—	—		
2. - Docket	—	—	T-Wiring	2000
3. - Records Assistance	2	—	32 modems	3200
4. - Public Room	4	—	16 CRT Maint	2880
5. - Acreage Inventory	—	—	1 Prtr Maint	360
3rd Floor - 6. - Fluids Adjudication	2	—		
7. - Agreements & Eval. Sec. and Eval. & Regs. Sec.	1	—		
8. - Solid Min. Adjudication	3	1		
4th Floor - 9. - Lands & Renewable Res.	1	—		
6th Floor - 10. - Title Section (Survey)	3*	—		
7th Floor - 11. - Mining Regulation Sec. and Min. Development Sec.	—	—		
12. - ADP	—	—		
Annex 13. - Division of Operations	**	—		
MILES CITY DO			2 (212)modems	$1000
1. - Admin./Public Room	—	—	2 modems	200
2. - Lands & Renewable Res.	—	—	3 CRT Maint	540
3. - Div. of Min. Resources	1	1	3 Prtr Maint	1080
4. - BDRA/PRRA (detached)	1	1		
5. - Billings RA (detached)	1	1		
6. - SDRA (detached)	—	—		
LEWISTOWN DO				
1st Floor - 1. - Admin./Public Room	—	—		
2nd Floor - 2. - Lands & Renewable Res.	—	—		
3. - Div. of Min. Resources	—	—		
1st Floor - 4. - Judith RA (attached)	—	—		
5. - RA (4) (detached)	—	—		
DICKINSON DO			2 modems	$ 200
1. - Admin./Public Room	—	—	1 CRT Maint	180
2. - Lands & Renewable Res.	—	—		
3. - Div. of Min. Resources	1	—		
BUTTE DO			Upgrade MUX	$2000
1. - Admin./Public Room	—	—	T-Wiring	500
2. - Div. of Res. Mgmt. & Div. of Operations	—	—	2 modems	200
3. - Headwaters RA (attached)	1	1	1 CRT Maint	180
4. - Dillon RA (detached)	—	—	1 Prtr Maint	360
Garnet RA (detached)	—	—		
TOTAL	21	5	Telecomm -	$ 11,300
			Maint -	5,580
				$ 16,880

* If Status is contracted, these CRTs may not be needed.
**When survey input is completed, a terminal will be transferred to Div of Operations for use by Appraisal, Cadastral, Law Enforcement and Engineering.

TABLE 9

SUMMARY TABLE - TELECOMMUNICATIONS/ADP NEEDS
TOTAL PROCUREMENT

Office/Location/Prime Users		CRTs	Printers	Telecomm/ADP Equipment	
				ADP	
MSO				MLCP	$10,000
2nd Floor -	1. - Accounts	—	—	MSU	40,000
	2. - Docket	2	1		
	3. - Records Assistance	5	1*		
	4. - Public Room	12	—	Telecomm	
	5. - Acreage Inventory	1	—	Matrix Switch	9000
3rd Floor -	6. - Fluids Adjudication	5	1	2 Matrix Upgrades	4000
	7. - Agreements & Eval. Sec. and Eval. & Regs. Sec.	1	—	1 (212)modem	500
	8. - Solid Min. Adjudication	5	2**	90 modems	9000
4th Floor -	9. - Lands & Renewable Res.	2	—	T-Wiring	6000
6th Floor -	10. - Title Section (Survey)	6***	1	2 MDC	5250
7th Floor -	11. - Mining Regulation Sec. and Min. Development Sec.	1	1	44 CRT Maint	7290
	12. - ADP	3	—	6 Prtr Maint	1980
Annex	13. - Division of Operations	1	1	2 Hi Speed Maint	1700
MILES CITY DO					
	1. - Admin./Public Room	1	1	Upgrade MUX	$2000
	2. - Lands & Renewable Res.	—	1*	3 (212)modems	1500
	3. - Div. of Min. Resources	3	2	10 modems	1000
	4. - BDRA/PRRA (detached)	1	1	T-Wiring	500
	5. - Billings RA (detached)	1	1	7 CRT Maint	1170
	6. - SDRA (detached)	1	1	6 Prtr Maint	2010
				1 Hi Speed Maint	900
LEWISTOWN DO					
1st Floor -	1. - Admin./Public Room	1	1*	Upgrade MUX	$2000
2nd Floor -	2. - Lands & Renewable Res.	1	1	8 modems	800
	3. - Div. of Min. Resources	1	1	T-Wiring	500
1st Floor -	4. - Judith RA (attached)	—	—	3 CRT Maint	495
	5. - RA (4) (detached)	—	—	2 Prtr Maint	660
				1 Hi Speed Maint	900
DICKINSON DO					
	1. - Admin./Public Room	—	1*	Upgrade MUX	$1000
	2. - Lands & Renewable Res.	1	1	8 modems	800
	3. - Div. of Min. Resources	2	1	T-Wiring	500
				3 CRT Maint	495
				2 Prtr Maint	630
				1 Hi Speed Maint	900

TABLE 9 (Continued)

SUMMARY TABLE - TELECOMMUNICATIONS/ADP NEEDS
TOTAL PROCUREMENT

Office/Location/Prime Users	CRTs	Printers	Telecomm/ADP Equipment	
BUTTE DO				
1. - Admin./Public Room	___	1*	Upgrade MUX	$2000
			1 (212)modem	500
2. - Div. of Res. Mgmt. &			6 modems	600
Div. of Operations	1	1	T-Wiring	500
3. - Headwaters RA (attached)	1	1	3 CRT Maint	495
4. - Dillon RA (detached)	1	1	3 Prtr Maint	990
Garnet RA (detached)	___	___	1 Hi Speed Maint	900
TOTAL	60	25	ADP -	$ 50,000
			Telecomm -	47,950
			Maint -	21,515
				$119,465

* High Speed Printer
** One of these two printers is a high speed printer and won't be needed if Section does not move to 7th Floor.
***Three CRTs may not be needed is status is contracted.

APPENDIX 1

DEFINITIONS

Land Description: Any recognized method of describing a parcel of land, including but not limited to the Public Land Survey systems, metes and bounds, parcel numbering, and tracting.

Ownership: A collection of rights to use and enjoy property, including the right to transfer to others.

Status: The availability of a given tract of land for governmental or Private use, or for the disposal or lease of the land or its resources into non-Federal ownership or tenure.

Title: The means whereby the owner of lands has the just possession of his property.

Federal Program: Activities of/within the executive, judicial and legislative branches of the Federal government.

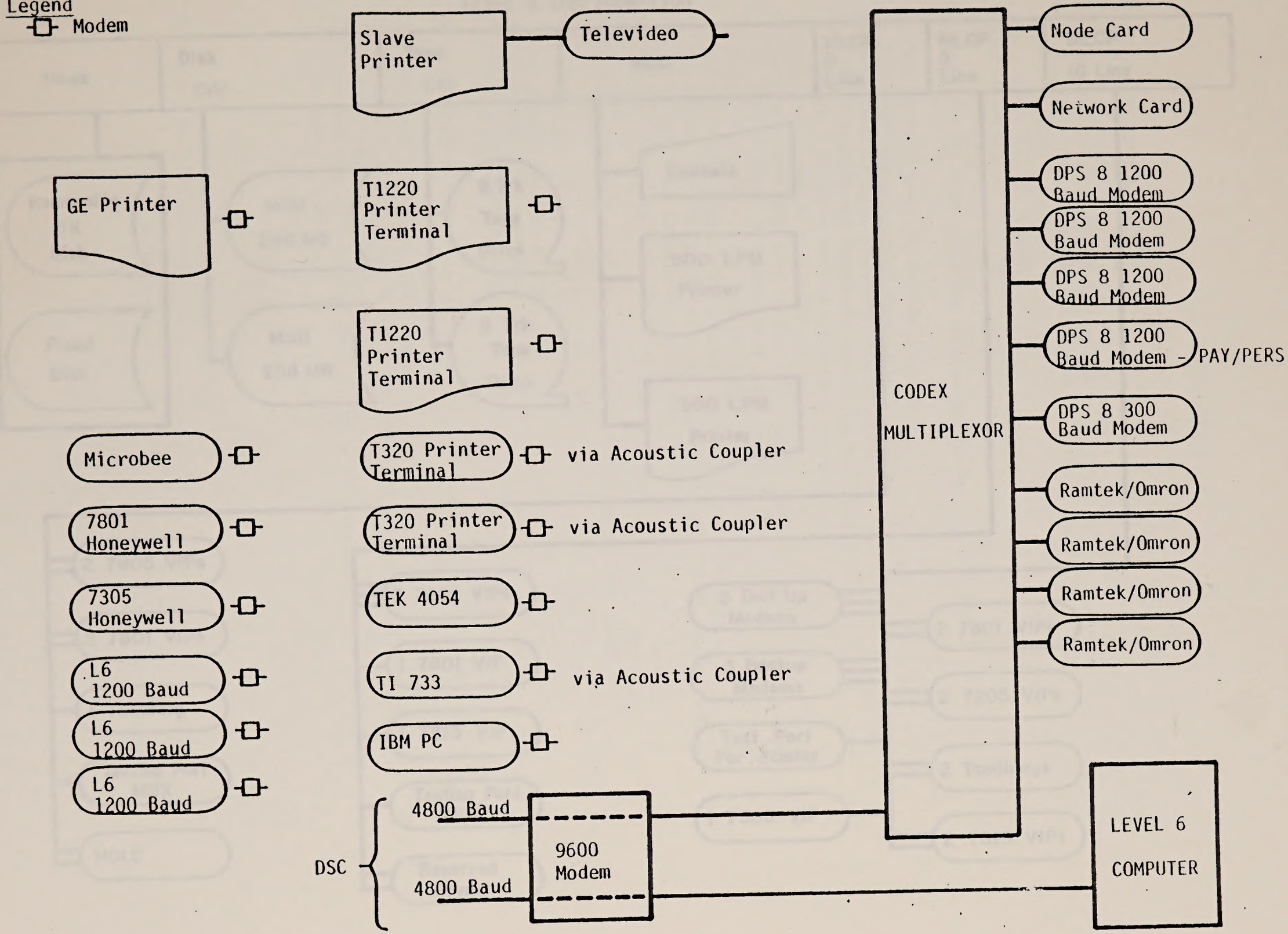
Public Users: Any non-Federal entity, including private citizens.

Records: Includes all books, papers, maps, plats, photographs, machine readable materials, or other documentary materials, regardless of physical form or characteristics, made or received by an agency of the United States Government under Federal law or in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the Government or because of the informational value of data in them, except records which would be exempt from disclosure under the Freedom of Information Act.

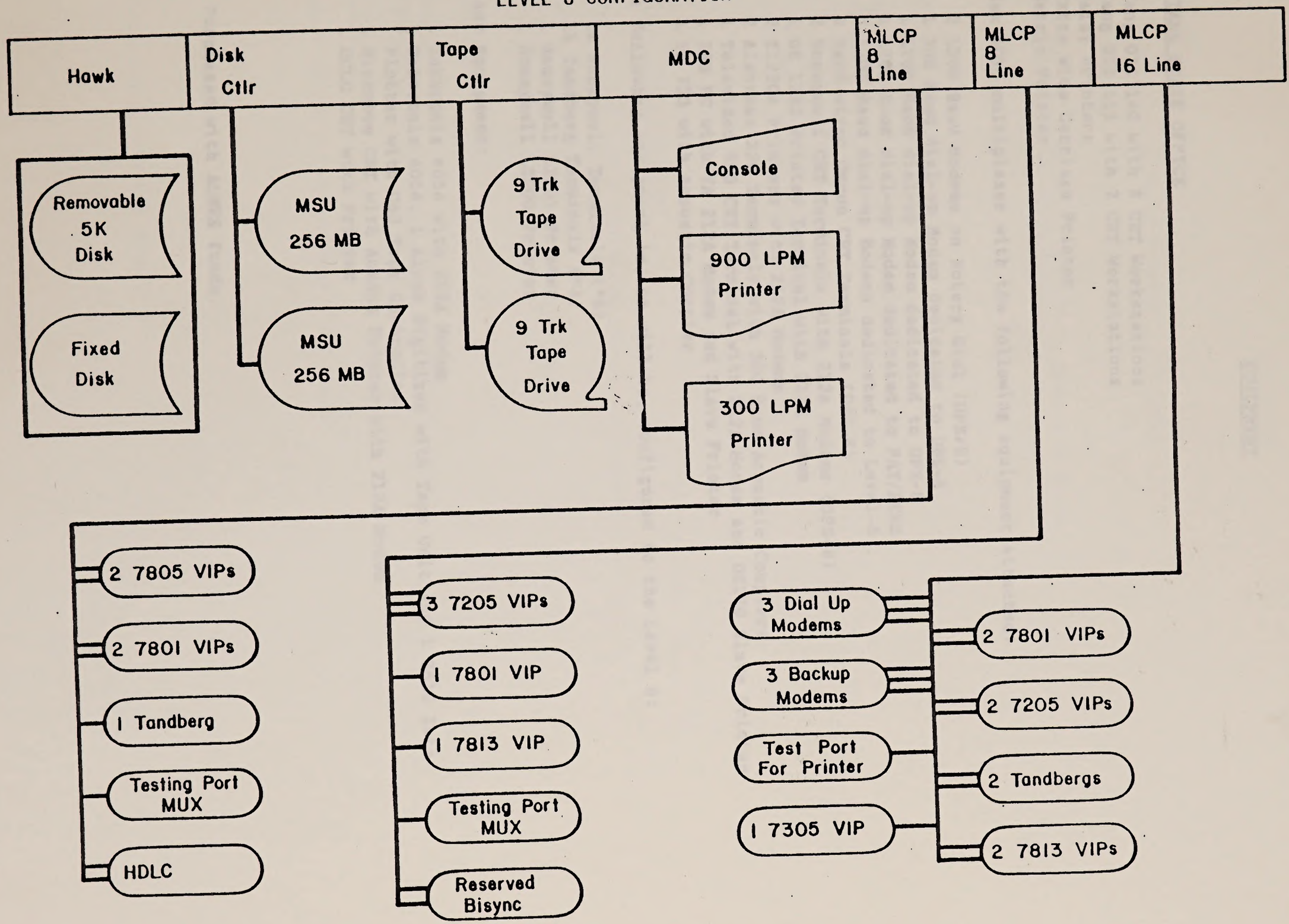
Lands: A specific part of the earth considered as property, including either the surface, or the mineral estate, or both.

MONTANA STATE OFFICE

Appendix 2



LEVEL 6 CONFIGURATION



EQUIPMENT

MONTANA STATE OFFICE

1 Wang OIS 140 with 8 CRT Workstations
1 Wang OIS 115 with 2 CRT Workstations
4 Daisy Printers
1 Extra Wide Carriage Printer
1 Matrix Printer

Codex 6030 multiplexer with the following equipment attached:

2 1200 Baud Modems on Rotary Dial (DPS/8)
1 300 Baud dial-up Modem dedicated to DPS-8
1 1200 Baud dial-up Modem dedicated to DPS-8
1 1200 Baud dial-up Modem dedicated to PAY/PERS
3 1200 Baud dial-up Modems dedicated to Level-6
4 Hard-wired Omron CRT Terminals (DPS-8)
2 Honeywell CRT Terminals with 212A Modems (DPS-8)
1 GE 1232 Printer Terminal with 212A Modem
2 T1220A Printers with 212A Modems
2 Alanthus 320 Terminals with 300 Baud Acoustic Couplers
1 Televideo 950 CRT Terminal with 212A Modem and DS180 Slave Printer
1 IBM PC with VA 212A Modem and Slave Printer
1 TI 733 with Acoustic Coupler

The following equipment is, or will be, configured to the Level 6:

14 Honeywell Terminals (*6)
11 Tandberg Terminals (*4)
1 Honeywell LTP01 Printer
1 Honeywell LTP00 Printer

Other Equipment:

1 Tektronix 4054 with 212A Modem
1 Tektronix 4054, 1 Altek Digitizer with Tape Unit and 1 3610 Zeta Plotter with C63 Tape Controller
1 Microbee CRT with Anadex Printer with 212A Modem
1 OCLC CRT with Printer

* Purchased with ALMRS funds.

EQUIPMENT

Havre RA

*Tandberg CRT with Tally Printer - 212 Modem

Great Falls RA

*Tandberg CRT with Tally Printer - Share 212 Modem
Televideo CRT with T1220 Printer

DICKINSON DISTRICT OFFICE

Wang OIS 115 with 2 CRT Workstations - 212 Modem
Wang Daisy Printer
Wang Matrix Printer
*Honeywell 7801 CRT with T1220 Printer
Televideo CRT with Anadex Printer
Multiplexor

BUTTE DISTRICT OFFICE

Wang OIS 115 with 2 CRT Workstations - 212 Modem
Wang Daisy Printer
Wang Matrix Printer
*Honeywell 7801 CRT with T1220 Printer
Multiplexor

Garnet RA

Wang OIS 40 - Share 212 Modem
*Tandberg with Tally Printer

Dillon RA

Omron CRT with T300 Printer - 212 Modem

*Purchased with ALMRS funds.

EQUIPMENT

MILES CITY DISTRICT OFFICE

Wang OIS 115 with 2 CRT Workstations - 212 Modem
Wang Daisy Printer
Wang Matrix Printer
Wang PC (Requisitioned 1/23/85)
*Honeywell 7801 CRT with T1220 Printer
Televideo CRT with Data South DS180 Printer
Tektronix 4054 with Dual Disk Drive and Printer
Multiplexor

Big Dry/Powder River RAs

*Tandberg CRT with Tally Printer - 212 Modem
Wang PC (Requisitioned 1/23/85)

Billings RA

*Tandberg CRT with Tally Printer - 212 Modem

South Dakota RA

Omron CRT with T1220 Printer - 212 Modem

LEWISTOWN DISTRICT OFFICE

Wang OIS 115 with 3 CRT Workstations - 212 Modem
Wang Daisy Printer
Wang Matrix Printer
Wang PC XC3
*Honeywell 7801 CRT with T1220 Printer
Tandberg CRT with Tally Printer (Judith RA)
Televideo CRT with Data South DS180 Printer
Multiplexor

Valley RA

*Tandberg CRT with Tally Printer - 212 Modem

Phillips RA

*Tandberg CRT with Tally Printer - 212 Modem

*Purchased with ALMRS funds.

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Denver, CO 80225-0047

EQUIPMENT

MILES CITY DISTRICT OFFICE

Wang OIS 115 with 2 CRT Workstations - 212 Modem
Wang Daisy Printer
Wang Matrix Printer
Wang PC (Requisitioned 1/23/85)
*Honeywell 7801 CRT with T1220 Printer
Televideo CRT with Data South DS180 Printer
Tektronix 4054 with Dual Disk Drive and Printer
Multiplexor

Big Dry/Powder River RAs

*Tandberg CRT with Tally Printer - 212 Modem
Wang PC (Requisitioned 1/23/85)

Billings RA

*Tandberg CRT with Tally Printer - 212 Modem

South Dakota RA

Omron CRT with T1220 Printer - 212 Modem

LEWISTOWN DISTRICT OFFICE

Wang OIS 115 with 3 CRT Workstations - 212 Modem
Wang Daisy Printer
Wang Matrix Printer
Wang PC XC3
*Honeywell 7801 CRT with T1220 Printer
Tandberg CRT with Tally Printer (Judith RA)
Televideo CRT with Data South DS180 Printer
Multiplexor

Valley RA

*Tandberg CRT with Tally Printer - 212 Modem

Phillips RA

*Tandberg CRT with Tally Printer - 212 Modem

*Purchased with ALMRS funds.

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